The Effect of the Announcement of Changes in Top Management on Share Returns and Financial Performance of New Zealand Companies

A thesis
submitted in fulfillment
of the requirements for the Degree of
Master of Commerce
in Finance
from the
University of Canterbury
Christchurch, New Zealand

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University of Canterbury
2001

Abstract

This study addresses the issue of the importance of the board of directors in the mechanism of Corporate governance. In this context the effects of changes in top management (appointment, resignation and retirement) on share returns and firm financial performance in New Zealand companies are examined employing event study methodology and regression analyses respectively. It is concluded that the appointment and the resignation of directors have a significant impact on the share returns. The results also show that the small firms tend to experience a greater impact from the change in directors than large firms. However, no significant effect have an impact on the long-term financial performance of the firm.

Acknowledgments

I would like to take this opportunity to thank many people who have assisted with the completion of this thesis. First, I would like the extend special thanks to my supervisor, Dr. Abeyratna Gunasekarage, for his supervision and guidance throughout the work on this thesis. Second, I wish to thank my mum, Mrs. Praphai Chiewanichakorn and my older brother, who knows what it takes to complete a Masters thesis, for their support, advice and encouragement to complete the thesis. Third, my special thanks to those who helped me with this thesis in other respects and all my friends, Mr Perapon Anusarnsunthorn, Miss Siriluk Sutthachai and Finailly, I am grateful to WASS staff who provided a valuable input to this thesis by correcting the manuscripts of all chapters.

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1 Introduction

In the modern world most public companies have diversified shareholders who are not directly involved with the operation of the companies. As most of these companies employ the managers, who do not hold majority ownership of that business, to run daily operations, it is suggested that a separation of ownership and control of companies is present. To achieve the objective of maximisation of shareholders' wealth, the objectives of managers must be aligned with those of shareholders.

However, when this is not the case, the agency problem occurs. Agency problem is usually observed when there is a separation of ownership and control. Also, it occurs when the agents no longer have the same financial incentive or goal as the owners do (Fama, 1980). It is suggested that without an effective control procedure, managers are more likely to take actions that deviate from the interests of the shareholders.

Corporate governance has been introduced to the organisation as a tool to overcome this agency problem. This idea is based on the theory of corporate governance and corporate control. Corporate governance and corporate control means the ability/power through ownership to determine the direction of the company. Corporate governance is the mechanism which is used to monitor and account for the managers' actions to ensure that their objectives are aligned with the objectives of shareholders.

The finance literature identifies four types of corporate governance mechanisms. They are internal control, external control, product and factors markets, and law and regulations. Two main methods, which are commonly cited in finance, are internal control and external control. Examples of internal control are employee compensation schemes, share options and having a board of directors, whereas the examples of external control are take-overs, mergers and acquisitions. The board of directors is

regarded as an important part of the firm's control structure. The board of directors is set up to fulfil the shareholders' goals of profit-making and having a performance monitoring function on behalf of the shareholders to ensure alignment between the goal of shareholders and those of managers. The board of directors generally consists with a chief executive officer (CEO) or/and managing director (MD), a chairperson, and a group of directors.

The main theme addressed in this study is that, if the board of directors plays a prominent role in supervising managerial decisions and aligning managerial objectives with those of shareholders, then the changes in these top executive positions have a value to outsider investors. If so, subsequent to an announcement of changes of top management, we should be able to observe a change in share prices. Further, it is reasonable to associate the financial performance of a firm to these changes.

Many studies have been carried out to examine the market response to changes in top management, employing the conventional event study methodology, in the USA and the UK and Japan. These studies have analysed numerous types of top management changes including appointments, resignations and retirements. However, no consensus has been emerged. Some studies report significant positive abnormal returns to shareholders around the period when the news of changes in top executives is officially released to the share market (Lubatkin *et al.*, 1989; Weisbach, 1988; and Bonnier and Bruner, 1989; Dahya, 1993). However, other studies find significant negative abnormal returns (Bendeck and Waller, 1999), while the rest fail to find evidence that share returns are significantly influenced by these changes (Reingnum, 1985; Furtado and Rozeff, 1987; and Warner *et al.*, 1988).

In addition, researchers have examined the effects of changes in top management on the performance of firms. However, similar to the results of event studies, no consensus has been reached. The results can be divided into three groups. First, the change is found to have a positive influence over an organisation (Smith *et al.*, 1984; Helmich, 1974). Second, the change of an individual has a negative impact on firm performance (Grusky, 1963,1964; Gamson and Scotch, 1964; Allen *et al.*, 1979).

Finally, it is suggested that the change has no significant impact on the firm's performance (Eitzen and Yetman, 1972; Samuelson *et al.,* 1985).

In addition, some studies have recognised that the size of the firm has a significant influence in this respect. Reingnum (1985) and Trow (1961) found that the small firms tend to show a higher positive effect compared to large firms.

To the knowledge of the writer the above issues have not been investigated in the New Zealand context. This study is intends to fill this gap by examining the effect of changes in top management on New Zealand companies. I use a sample of top management changes which occurred in both large and small New Zealand companies during the seven-year period from 1993-1999 to study the effect of such changes on return and financial performance of these companies.

The sample used in this study consists of 449 changes of top executives. It includes different types of announcements, namely appointment of CEOs/MDs (57), retirement of CEOs/MDs (4), resignation of CEOs/MDs (23), appointment of chairperson (14), retirement of chairperson (4), resignation of chairperson (5), appointment of director (188), resignation of director (111), and retirement of director (43). Apart from that, the top management appointments are also divided into groups of inside CEO/MD appointments (14), outside CEO/MD appointments (43), inside chairperson appointments (7), outside chairperson appointments (7), inside director appointments (19) and outside director appointments (169).

The principal methodology employed to examine the market response to such announcements is the event study methodology. Abnormal returns are calculated for a 21-day test period surrounding the event day for each category of top management change and any significant price responses are detected. The influence of these changes on firm financial performance is examined employing regression methodology. This is done for only a limited number of sub samples (that is, for the sub samples for which statistically significant abnormal returns are present during the announcement period of top management changes). In both event study analysis and performance analysis, the influence of the size of the firm on the outcome is also investigated.

This thesis consists of seven chapters. Chapter Two presents literature relating to this topic. In Chapter Three, the research sample and the research method are presented. Chapters Four and Five discuss the findings of the event study. In Chapter Six, the findings of the analysis of the firms' financial performance are discussed. Finally, the conclusion is drawn in Chapter Seven.

2 Literature review

2.1 Introduction

Financial theory posits that the goal of economic organisations is to maximise shareholders' wealth. Attaining this goal is not an issue when owners are also the managers. However, since World War II, corporate ownership has become increasingly diffused world-wide. This change raises the issue of the relationship between owners (principals) and managers (agents). In an ideal world, managers would sign a complete contract that states exactly their responsibilities and limitations, including how profits would be allocated under all circumstances. However, the problem is that most future events cannot be predicted with accuracy. As a result, complete contracts are unfeasible (Shleifer and Vishny, 1986). Therefore, contracts are written in such a way that managers obtain the right to make decisions, when certain areas are not clearly defined or stated in the contract. This raises the problem of the conflict between the principal and the agents (Fama and Jensen, 1983a).

Since the 1980s, the corporate governance mechanism has increasingly been subjected to empirical examination by many researchers (e.g. Weisbach, 1988; Warner *et al.*, 1988; Bonnier and Bruner, 1989). It is believed to have an important influence on the operating performance of the company and in consequence on the goal of the firm. Before World War II, the majority of companies were managed by their entrepreneurs. Therefore, there was no need to ensure that the goal of the business was the same as the interest of the manager. However, after World War II, the business structure changed from one owner to having diversified owners, who hire the managers to operate day-to-day transactions. This separation of ownership from the control of the firm creates a conflict between the interests of managers and owners;

managers may maximise their own utility at the expense of the resources of owners. Corporate governance has been introduced as a mechanism which accounts for the managers' actions and ensures that the managers act in the best interests of the owners. There are four general types of governance mechanisms: 1) internal controls, 2) external controls, 3) law and regulations and 4) product and factor markets.

This chapter is structured as follows: in the next section, four types of corporate governance mechanisms are discussed. In section 2.3, the duty and importance of board of directors and top management is explored. The comparison between roles of board of directors in different countries is also made in this section. Then, section 2.4 reviews the empirical studies of market response to top management change. Finally, the effect on long-term firm performance found in prior studies is examined in section 2.5.

2.2 Corporate governance

Furtado and Rozeff (1987) suggest that the hiring and firing of top management is considered to be one of the important mechanisms of corporate control. This idea is based on the theory of Corporate governance. Corporate governance attempts to determine the relationships of the managers and shareholders to the corporation and to one another (Monks and Minow, 1995). It is concerned with the design of checks and balancing systems on managerial behaviour (Hart, 1995). Also, when the firm is under-performing, the shareholders are able to take action and replace incompetent managers in order to improve the performance of the firm. Furthermore, the shareholders can use one or more of these controlling mechanisms to ensure that the top managers are performing their duties in good faith.

Several studies indicate that the managers act in their own interest rather than the shareholders' (Fama, 1980; Fama and Jensen, 1983a, 1983b). This is possible because managers posses more information about the firm and the shareholders are wildly dispersed. This phenomenon is called the agency problem. According to Jensen and Meckling (1976), an agency problem exists when managers own less than 100 per

cent of the firm. With less than 100 per cent ownership, managers can shift part of the cost and risk associated with decisions made in their own interest to the shareholders.

In large publicly held corporations, decision-making and risk-bearing are done by two separate parties. Top management is generally responsible for suggesting and implementing major policy initiatives, while shareholders or residual claimants, who are largely diffused, take up the bulk of the risk associated with those decisions. Because management does not bear a substantial portion of the wealth effects of their decisions, an agency problem between management and shareholders occurs. Examples of agency conflict are excessive perk consumption and engaging in non-optimal investments by managers. These conflicts of interest occur as managers receive the full benefits of such opportunistic and self-serving behaviour while bearing a cost equal only to their proportional ownership in the firm (Fama and Jensen, 1983a).

The agency conflict has a crucial impact on the governance structure of the firm. An important factor in the survival of organisational forms is to control these agency problems. Fama and Jensen (1983a) discuss the role of market and organisational mechanisms in reducing these agency conflicts. Further, they highlight the importance of better aligning management interests with those of shareholders. In addition, other alternative methods of control such as internal control, law and regulation, and product and factor markets have also been suggested. The next subsections explore these corporate governance mechanisms and their effectiveness in detail.

2.2.1 Internal controls

The internal control mechanism involves the adjustment and change of the structure of the company without external intervention of the market. Examples of internal control monitoring mechanisms are establishing the board of directors and designing an appropriate managerial compensation scheme.

Smith and Watts (1984) present evidence that the compensation plans approved by boards of directors generally link pay to performance measures which are themselves

directly related to shareholder wealth. For instance, the value of stock options held by a manager at the beginning of a year gives him an incentive to act in ways which maximise stockholder wealth throughout that year.

Nonetheless, some researchers have argued that compensation plans do not induce top management to maximise shareholder wealth. Baumol (1967) and Marris (1963) assert that a CEO is more concerned with the size or growth rate of the firm than with profitability. This occurs because compensation plans link pay to these characteristics.

Apart from that, these compensation plans ideally tie the self-interest of the managers to the interests of outside shareholders. However, managers may withhold some relevant information from compensation committees when that information would attribute poor firm performance to bad management. Some researchers argue that agency problems are not solved and this is an inefficient method because boards are captives of top management and make compensation decisions based only on the information supplied to them by that management (Coughlan and Schmidt, 1985).

In addition to compensation schemes, one popular internal control mechanism used by firms is the board of directors. The board of directors is used by the shareholders to monitor the managers' and the firms' performance. Also it is used as a mean to remove inefficient top managers, as it is believed that top managers, such as chief executive officers and managing directors, can influence the strategies and polices of the firm. This is carried out to ensure the fulfilment of shareholders' interest in wealth maximisation (Weibach, 1988). According to Fama and Jensen (1983b), the board reduces agency conflict by keeping separate the management and control aspects of the decision-making process. Decision-making includes the initiation and implementation aspects, while control involves the ratification and monitoring aspects of the decision-making process. In this regard, board composition becomes significant, because the primary responsibility in keeping the board independent depends on outside disinterested members of the board (Fama, 1980; Fama and Jensen, 1983b; Weisbach, 1988; Zahra and Pearce, 1989). However, the board can become redundant when there is a dominant active shareholder, especially when the major shareholder is a family or the government (Turnbull, 2000).

Apart from electing the board, major shareholders can also participate in company management by engaging in the position of director, as found in Europe and Japan. This practice is also common in other countries with extensive foreign investment, such as in Australia, New Zealand and Canada and in developing economies which have many founding entrepreneurs and family groups in control (Stapeldon, 1998). Shleifer and Vishny (1986) suggest that the monitoring the holders of large share blocks is also necessary, as they are more likely to have more voting power, and can therefore excessively influence the decisions made about the firms' policies.

Although some researchers argue that the board is an ineffective control mechanism,[1] the majority of the studies continue to regard the board as important in the organisation.[2] The role of the board of directors will be revisited in a later section.

2.2.2 External controls

External control or the market for corporate control has been a very popular mechanism used by the firm (Jarrell *et al.*, 1988). The market for corporate control is the market which has the right to control the management of corporate resources. Companies experiencing a decline in performance are viewed as targets for takeover by bidding firms. When a bidding firm acquires a target firm, the control rights of the target firm are transferred to the board of directors of the acquiring firm. While corporate boards always retain top-level control rights, they normally lose the right to manage corporate resources to internal managers in the event of a takeover. This way, the top management of the acquiring firm acquires the rights to manage the resources of the target firm.

Takeovers can occur through mergers, tender offers, or proxy contests. Sometimes combinations of all three are involved. In mergers or tender offers, the bidding firm offers to buy the common stock of the target firm at a price in excess of the target firm's previous market value. Mergers are negotiated directly with the managers of the target firm and approved by the target firm's board of directors before going to the

[1] For example, Grossman and Hart (1980), Rappaport (1990) and Mace (1986).
[2] See Bathala and Rao (1995), Sheikh and Rees (1995) and Williamson (1996).

vote by the target firm's shareholders for approval. On the other hand, tender offers are offers to buy shares directly from target shareholders, who decide individually whether to tender their shares for sale to the bidding firm. A "friendly" tender offer refers to offers that are supported by target firm's management team. In "hostile" tender offers, target management opposes the tender offers. Proxy contests occur when a rebellious group, often led by a dissatisfied former manager or large stockholder, attempts to gain controlling seats on the board of directors. Finally, leveraged buyouts are buyouts of shareholders' equity, heavily financed with debt by a group that frequently includes current management (Jensen and Ruback, 1983; Jarrell *et al.*, 1988).

Past empirical evidence has shown that takeovers, and hostile takeovers in particular, serve as a useful external control mechanism for removing managers who fail to meet shareholders' objective of maximising the firm's value (Morck *et al.*, 1989; Martin and McConnell, 1991; Ikenberry and Lakonishok, 1993). Further, hostile takeovers tend to be directed at poorly performing firms as a disciplinary mechanism (Martin and McConnell, 1991; Morck *et al.*, 1989).

2.2.3 Laws and regulations

To overcome the agency problem, an effective corporate governance system should provide mechanisms for regulating directors' duties in order to restrain them from abusing their powers and to ensure that they act in the best interests of the company in its broad sense (Sheikh and Rees, 1995). There are various methods of regulating directors' and managers' duties, as laws and regulations in different countries are diverse. For example, in United Kingdom (UK), the shareholders are protected to a certain degree under the Companies Act 1985 and the Insolvency Act 1986.

In New Zealand, new company legislation came into force in 1994. Under the Companies Act 1993, the Financial Reporting Act 1993, and related legislation, the duties and liabilities of directors were codified and expanded (Cahan and Wilkinson, 1999). This legislation clarified and imposed new and more severe penalties. In

addition, Cahan and Wilkinson (1999) find evidence that firms realigned board membership in responses to legislation changes in the company law.

Furthermore, regulatory agencies in different countries view certain characteristics of the boards of directors as being important determinants of their effectiveness. For example, in the United States (USA), the New York Stock Exchange (NYSE) requires that listed companies have audit committees made up solely of outside directors. In addition, the Securities and Exchange Commission (SEC) recommends that nominating and compensating committees should be dominated by outside directors (Mak and Roush, 2000).

Although legal authorities have attempted to draw up a thorough code of duties of directors, this goal is very hard to reach. This is because the process can become costly and it is difficult to ensure that the managers will follow it. For instance, Baysinger and Butler (1985) suggest that the law has left out matters concerning the size, composition, and structure of boards. This absence of governmental and legal direction encourages certain shareholders to abuse the separation of ownership and control in large companies.

Furthermore, Green (1995) states that the law- making system has failed to act as an effective governance mechanism. It is unable to cope with the pace of corporate development, for example, the development of new type of businesses, new industries, the size and complexity of economic influence and the vanishing boundaries of the trading world.

2.2.4 Product and Factor market competition

The main objective of shareholders is to maximise their wealth, whereas the managers' aim tend to move toward the expansion of their power. The payouts to shareholders is an area that creates major conflicts between shareholders' interests and those of managers (Jensen, 1986). Payouts to shareholders reduce the resources under managers' control, thereby reducing managers' power to spend them at their discretion. By obtaining new capital, the company will expose itself to the monitoring

of a capital markets, whereas financing projects internally avoids this monitoring (Rozeff, 1982).

As managers are willing to expand their own power, they have the incentives to cause the firms to grow beyond their optimal size. They will achieve this by investing free cash flow in low return projects, instead of distributing these resources to shareholders as dividends. As the size of the firm increases, the resources under their control expands (Jensen, 1986).

Competition in the product and factor markets tends to drive prices towards a minimum average cost in an activity. Therefore, managers must motivate their firms to increase efficiency in order to enhance the profitability. For example, the managers are pressured to increase the investments in new systems to reduce product costs. However, it is suggested that these product and factor market disciplinary forces are often less effective in new activities and those that involve substantial economic rents and quasi rents (for example, the oil industry) (Jensen, 1986).

As stated above, attempts to use the laws and regulations method of monitoring and the product and factor market are believed to have failed to minimise agency conflict (Grossman and Hart, 1980; Rappaport, 1990). However, the external control mechanism of corporate governance has been proved by many researchers to be effective in reinstalling and improving firms' declining performance, whereas the evidence of the efficiency of internal control is still arguable. In the USA and the UK, it has been found that firms need to use the interaction of internal and external performance monitoring systems[3]. Following the takeover of a poorly performing company, firms tend to change key board members. This suggestion is supported by a study carried out in the USA by Walsh (1988), which found that successful takeovers trigger a forced restructuring of the board in a poorly performing target firm. Hadlock and Lumer (1997) suggest in their study that the internal and external control mechanisms function as complements rather than substitutes in the removal of poor performing top managers. Although some studies argue that internal control has been

[3] Baysinger and Butler (1985), Brickley and James (1987), Fama (1980), Fama and Jensen (1983), Dahya and Powell (1998).

ineffective, it is believed that the board of directors still plays an important role as an internal control mechanism of corporate governance.

This study focuses on the importance of the board of directors as an internal monitoring mechanism used by New Zealand firms. I focus on the board of directors as it forms an important part of the decision control system, and it is responsible for ratifying and/or recommending important corporate decisions and policy initiatives and it has the power to hire and fire top management. In the following section, the duties and the roles of the board of directors are examined.

2.3 Board of directors

The board of directors is the group of people selected by shareholders to act on their behalf in the decision-making process and to operate the firm to achieve the shareholders' objective of wealth maximization (Hart, 1995). It is recognized as one of the most important corporate governance control mechanisms used by the large corporates (Bathala and Rao, 1995). The board has the power, given by the shareholders, to control and monitor major policy initiatives and set the compensation for top managers (Fama and Jensen, 1983b). It also serves to resolve conflicts of interest among managers and shareholders while being responsible for setting the company's strategic aims, providing the leadership and supervising managers of the business, and reporting progress to shareholders (Baysinger and Butler, 1985; Sheikh and Rees, 1995).

The most important role of the board of directors is to allow the shareholders to direct the firm if it experiences a crisis. For example, when the firm is under-performing, the shareholders can exercise control through the board of directors, such as replacing the company's top management, in light to improve the firm's performance (Hart, 1995).

In this study, top management is defined as chief executive officers (CEO), managing directors (MD), chairperson and directors on the board. Each of these individuals plays an important role in the management of the firm.

2.3.1 The importance and duty of top management

As the shareholders elect the board of directors to be their representatives, the board has to be responsible to the shareholders. The role of individual directors is to facilitate the strategy formulation and implementation. Each director may use individual experience, expertise and valuable qualities of judgement to the benefit of the firm (Mace, 1971). The board of directors often consists of both insiders, who serve as executives of the companies, and outsiders, who do not deal with the operating functions of the firm (Fox, 1995). The inside directors are expected to facilitate the communication of relevant information to the outside directors during the board meeting. On the other hand, the outsiders serve on the board to prevent collusion among top managers on the board and thereby increase the effectiveness of the internal control (Fama, 1980; Mace, 1971; Weisbach, 1988). In addition, Rosenstein and Wyatt (1990) and Warner *et al.*, (1988) suggest that the outsiders can use their experience and new perspective to improve the firm's strategic planning.

However, Donaldson and Davis (1994) and Hart (1995) argue that the outside director is an ineffective control device. The suggested reasons are, firstly, they may not have a significant financial interest in the company. Therefore, they may have little to gain personally from improvements in company performance. Secondly, non-executive directors are busy people and probably have little time to think about the company's affairs, or to collect additional information about the company to assist them in evaluation of top management performance. Finally, non-executive directors may feel obliged to the management who proposed them as directors in the first place (Hart, 1995).

Nevertheless, Fox (1995) finds that major shareholders can also have considerable influence, when they desire, without gaining board representation. The possible reason is that major shareholders typically have the ability to dismiss directors. This is believed to be the way the shareholder can exert their influence with regard to the company's strategic direction.

However, Fama and Jensen (1983b) note that most of the corporates maintain a mix of insider and outsider directors on the board. Legal scholars believe that the board should be independent, in order to monitoring the performance of the top managers effectively. This view expects company boards to be dominated by outside members.

Furthermore, the directors as a group also have a leader, namely the board chairperson. The chairperson's duty is to ensure that the meetings are conducted properly, assisted by the secretary, who takes account of and summarises the meeting. The chairperson also declares the results of votes. The person holding this role may also be the chief executive officer (CEO) of the company. However, Sheikh and Ree (1995) recommend that this role of chairperson and CEO should be separated for the purpose of monitoring the performance and to reduce the agency problem.

The CEO is the person who is involved in operating and carrying out the board decisions and policies. The CEO is also expected to have a large share of influence and power over the company's performance as its director and chairperson. Therefore, a change in CEO or top management can signify important changes in the policies and strategies of a corporation.

2.3.2 Comparison of the board of directors in different countries

Companies in the USA, the UK and Australia have a unitary board structure. However, due to the variation of laws, regulations, culture and different rules in the share markets in some of the European and Asian countries, countries such as Germany and Japan have developed different board structures for their publicly traded corporations (Analytica, 1992). In Japan, the representatives of the banks are involved with firms as directors on the companies' boards. On the other hand, German companies use two-tier boards: a management board and a supervisory board (Fox, 1995).

The Supervisory boards system not only introduces checks and balances in managing self-serving activities of directors but it also simplifies directors' duties and responsibilities and reduces their personal liabilities and work load (Turnbull, 2000).

This board typically includes significant bank representation and worker members, while the executive board is composed equally of management and labour. Furthermore, this model of two-tier boards was proposed to the UK by the Bullock Committee years ago (Bulllock, 1977).

Although UK and US systems have unitary boards, it is suggested by Turnbull (2000) that a dominant shareholder of a publicly traded firm could create a two-tier control system similar to a supervisory board. This is because a dominant shareholder has the power to manage the conflicts of interest the directors of unitary board are exposed to.

One of the differences between the Japanese/German and the US board is that Japanese and German companies are financed mainly by the banking system, whereas the US corporates rely on obtaining the equity capital from the share market. Therefore, the majority of shares of German and Japanese companies are held by a small number of block shareholders, whereas the US and UK companies' shareholdings are more diversified, with a larger number of shareholders who hold a smaller number of shares.

As the German and Japanese corporations are closely related to the banks, the banks are able to control the management and supervise their performance more radically. Therefore, in contrast to US companies, there is minimal intervention of the market or external control mechanisms, such as takeover or proxy fights, in controlling management behaviour. Without these interruptions of the market control, Japanese and German companies are said to be more stable and able to focus more on long-term investment projects. On the other hand, UK and US companies tend to aim toward short-term performance, such as the increase in the firms' earnings (Kaplan, 1994; Kaplan and Minton, 1994).

Apart from that, the close tie between the banks and firms in Germany and Japan is also viewed as a tool which helps reduce the agency cost. It also allows more effective monitoring of managers than in US firms. On the other hand, others argue that the stability can harm such shareholders instead of benefiting them, because the manager might ask the bank to bail out the business in exchange to the higher fee or interest

rate. This relationship might encourage managers to act toward more in their own interest, as managers are less fearful of the company being the target of takeover.

Besides the differences between the board structure and the relationship with financial institutions, there are variations in board size and composition among these countries. For instances, US and UK companies are observed to have an average board size of 12 directors.[4] However, a higher percentage of US companies have the same person holding both the CEO and the chairperson positions than their UK counterparts (Dalton and Kesner, 1987). On the other hand, firms in Germany have an average of 7 members on the management board and 18 directors on the supervisory board, whereas Japanese companies have an average of 21 directors, which includes the representatives from the banks on the board (Fox, 1995; Kaplan, 1994 and Kaplan and Minton, 1994). The higher number of directors on the boards of Japanese companies could be the result of cultural differences. In addition, it is found that in contrast with US and UK companies, the CEO and chairperson's duties tend to be separated in Japan. Further, the German and Japanese corporations tend to have fewer outside directors compared to those present in UK and US boards (Kaplan and Minton, 1994; Kaplan, 1994).

In New Zealand, public companies follow the US system of having unitary boards. The average board size of six tends to be smaller than those in the UK and US boards, with the majority of the board being outside directors. However, the number of directors is similar to that of the Australian public companies. Unlike the US boards, there are only a small proportion of listed companies that have chief executives who are also the board chairperson (Fox, 1995).

Regardless of the difference in board composition between different countries, the board and top managers are still viewed as important personnel in governing a firm. Therefore, changes in key players on the board are expected to lead to a change in firms' performance. Although top managers' contribution to the firm value is not directly observable, stock returns are a potential source of information (Warner *et al.*, 1988). Apart from looking at the share returns, most of the studies also used financial

[4] Brickley *et al.* (1994), Dalton and Kesner (1987).

data, such as earnings reports and financial ratios as an alternative measurement (Warner *et al.*, 1988). For the purpose of current study, the measurement of effects of changes in top management on the firm are divided into two categories: short-term effect and long-term effect. First, we look at the empirical evidence relating to the effect on the share return during the period when the announcements of changes in top management are made to the market. Then, we review prior empirical research relating to the effects of changes in top management on the long-term financial performance of the firms.

2.4 Market response to top management changes [5]

It is presumed that the management team is better informed about the firm's direction of future strategy and its performance than the outside investors. The announcements of changes in top management then serve as a signal that conveys information about these expectations. Event studies, which is the method that has been widely used by researchers, allow us to determine how quickly share prices respond to new information contained in the announcements of changes in top management.

If the market is semi-strong form efficient, it is expected that the effects of the new information should arise during the announcement period (two-day or three-day period) in the form of statistically significant abnormal returns. This effect can be either positive or negative depending on the nature of investors' expectations. A positive reaction by the market to such announcements will suggest that the market perceives the current decision to be in the stockholders' interest. Evidence obtained to answer this question can also be utilised to draw inferences regarding the broader issue of whether previous management in general has been perceived as working in the interests of the shareholders. On the other hand, when investors view the announcement unfavourably, they tend to sell the share of that company. This results in a decrease in the share price.

Numerous studies estimate the effect of a change in top management on stock prices of firms. However, it is important to note that in an efficient market, stock return is a

[5] The summaries of related literatures are provided in Appendix 2.1.

noisy measure of management's performance (Warner *et al.*, 1988). Mahajan and Lummer (1993) suggest that if shareholders hold the incumbent management personnel in high esteem, they will react positively to the announcements of the alteration of management entrenchment but negatively to the restructuring of the board.

Top management changes, whether voluntary or involuntary, represent major events for the firm. They can determine the company's subsequent performance and direction (Virany and Tushman, 1986). Reingnum (1985) states that the importance of these events is often reflected in the significant movement of the firms' stock prices around the management change announcement date. One such event is executives losing decision-making power in the firm, for example, in the event of retirement or resignation. Other events are the hiring and firing of directors and promoting them to higher positions. Bendeck and Waller (1999) observe the absence of significant excess returns with the vale of 0.07 per cent for senior management departure announcements, whereas the excess return of –0.77 is found in the event of non-senior management change announcements.

Apart from considering the position of the top management, Reingnum (1985) and Rediker and Seth (1995) have pointed out the effect of the change depending on the firm size. It is further suggested that small firms may have less complex control structures than large firms. Therefore, the effect of a change in one management position will be more meaningful in a small firm than in a large firm. Rosenstein and Wyatt (1990) find evidence to support this suggestion. They find that the cumulative abnormal return for small firms is significantly positive (0.0034), whereas an insignificant abnormal return is observed for large firms. However, the test for differences between these groups' means fail to show a level of significance.

In addition, Bonnier and Bruner (1989) suggest that changes in different positions, such as CEOs, MDs, chairperson and directors, have varying degrees of influence over a firm's decision. They find that a change in CEO in US corporations has the largest positive and significant abnormal return. Lubatkin *et al.* (1989), however, find preferences of the investors to be indifferent concerning management positions. In addition, a similar conclusion was reached by Mahajan and Lummer (1993), who

suggested that the investors were not indifferent about changes in the positions of leadership.

Further, variations in these events that have been subjected to the investigation in empirical studies, are appointments, resignations and retirements. In the past, there was not consensus between researchers regarding the affect of these announcements on share returns. Several studies report significant positive abnormal returns to shareholders around these events (Lubatkin *et al.*, 1989; Weisbach, 1988; and Bonnier and Bruner, 1989), whereas others find negative abnormal returns (Bendeck and Waller, 1999), or no significant share price reaction (Reingnum, 1985; Furtado and Rozeff, 1987; and Warner *et al.*, 1988).

In addition, Bendeck and Waller (1999) suggest that these different reactions of the share price to the announcement depend upon how the share market view each type of change. Therefore, in the next subsection, the effects of individual types of top management changes on the share returns are examined in detail.

2.4.1 Inside and Outside appointments of Top managers

When a new manager is appointed, the investors' expectation of the firm performance is reflected in share returns. Appointed managers can be selected from within the company or from outside the company. Bonnier and Bruner (1989) find the return on the day before the announcement and the announcement day to be significantly positive for the appointment of a CEO with abnormal returns of 1.566 per cent and 0.913 per cent respectively. The cumulative abnormal return for the two-day announcement period is 2.479 (with a *t*-statistic of 4.39). However, these findings contrast with the insignificant abnormal return for the daily data found by Warner *et al.* (1988). A similar conclusion is drawn in Reingnum (1985), who found an insignificant negative abnormal return of –0.06 per cent on the announcement day of the appointments of chairperson and president. However, when the origin of the appointment is accounted for, it is found that outside appointments of chairman and president show a significant abnormal return of 1.46 per cent on the announcement day, whereas internal appointments show an insignificant negative abnormal return of

–0.29 per cent. Betty and Zajac (1987) found an insignificant return on the day of the CEO appointment announcements. However, when these announcements are separated using the origin of the managers (inside or outside the companies), they found that the investors favoured the inside appointments over outside appointments.

Apart from that, Weisbach (1988) points out the difference in monitoring between the inside director and the outside director. Furthermore, Furtado and Rozeff (1987) find a highly significant positive abnormal return of 0.51 per cent to the inside manager appointment announcements during the announcement period, while the return for outside appointments is -1.22 per cent, which shows that internal appointments produce significantly higher returns than outside appointments.

In contrast, Lubatkin *et al.* (1989), after examining 477 CEO appointments, find a negative reaction by outside investors to inside appointment announcements, while they observe a positively significant effect of 0.11 per cent on share prices for outside appointments. Similar results are found by Warner *et al* (1988), Rosenstein and Wyatt (1989), Borakhovich *et al.* (1996) and Weisbach (1988), which suggest that investors view the appointment of outside managers more positively than inside managers. This supports the argument that investors view the appointment of the outsiders as a part of the firm's expansion into new areas in which the firm has no specific human capital, by using the outsider's experience and knowledge (Warner *et al.*, 1988).

A similar result emerges from the study done in the UK by Dahya (1993). The study finds positive abnormal returns after examining outside appointment announcements. In addition, Kaplan and Minton (1994) also draw the conclusion that in Japan, outside appointments are closely related to stock performance, with the insignificant abnormal return of zero per cent reported in the year the announcements are made. Kang and Shivdasani (1995), who examine the president turnover in Japan, also observe a similar result. They find that in the announcement year the excess stock return shows an insignificant positive value of 1.31 per cent. These findings suggest that the changes have no significant influence on stock returns. In addition, Kaplan (1994) establishes the evidence that the stock performance has an influence on the outside appointment of top management in Germany.

2.4.2 Resignation of Top Manager Announcement

After the observation of management change announcements for 28 investment banks during 1975-1994, Bendeck and Waller (1999) find that the excess return in the event of managers losing power is –0.41 per cent. The associated *t*-statistic is –2.32. On the other hand, firms having senior management departures have an announcement-period excess return of –0.65 per cent with a *t*-statistic of –3.33. A similar result is found by Furtado (1985). In contrast, Denis and Denis (1995) find that the abnormal return for forced resignations is 1.5 per cent (with a *t*-statistic of 2.30). Furthermore, they observe a significant average abnormal return of 2.5 per cent (with a *t*-statistic of 2.90) associated with the top executive changes. Similarly, Weisbach (1988) finds that the abnormal returns from resignation are positive and significantly different from zero for the three-day event window from the day before the announcement to the day after the announcement. Warner *et al.* (1988) examine 269 resignation announcements of CEOs and find that the effect on stock return is not significantly different from zero. This suggests that the CEO resignations have no effect on the firm. Dahya (1993) also finds an insignificant abnormal return of 0.64 per cent on the day of the announcement (with 0.14 per cent during the three-day announcement period) following mandatory retirement in UK companies. Mahajan and Lummer (1993) examine 100 mandatory retirements and find a positive abnormal return of 0.29 per cent with an associated *t*-statistic of 0.85 during the two-day announcement period. They also find significant excess return for involuntary loss of power, whereas they find voluntary resignations to generate an insignificant abnormal return of 0.21 per cent.

2.4.3 Retirement of Top Manager Announcement

Furtado (1985) believes that the normal retirements of top managers are normally anticipated by shareholders, and therefore there should be no significant movement in share returns. His study finds supportive evidence for this argument in that the share returns during the announcement period are not significantly different from zero. However, Dahya (1993), in his UK study, examines the non-mandatory retirement and obtains a significant abnormal return of 0.58 per cent (with a *t*-statistic of 2.61) on

the day preceding the announcement. The announcement day abnormal return is insignificantly negative at –0.18 per cent. But, the abnormal return on the day immediately following the announcement is 0.99 per cent with a *t*-statistic of 3.13. Denis and Denis (1995) find the abnormal return of normal retirements to have an average of 0.2 per cent (with a *t*-statistic of 0.5).

Furthermore, Betty and Zajac (1987) argue that when investors anticipate the announcement, a case of increase in the stock price largely before the event date will arise. On the other hand, if the event is unanticipated, the stock price will experience a substantial decrease.

Given the noise in stock returns, alternative sources of information, such as earnings reports, could provide measures more closely associated with management performance. Osborn *et al.* (1981) find profit, along with other environmental variables, to be a weak predictors of management change. Some measures could incorporate information not reflected in stock returns, for example, inside information which can only be obtained from lower-level managers (Warner *et al.*, 1988). Therefore, the research findings relating to of the effects of the announcements on the firms' long-term performance is discussed in the next section.

2.5 Effect on Firm performance [6]

In sports teams, Brown (1982) finds evidence suggesting that the bad performance lead to the firing of the coach. This is supported by the results found by Allen *et al.* (1979) after examining major league baseball teams. They find that the frequency of succession is negatively related to the team performance. A similar situation seems to apply to the business environment. Top management change is said to be the result of declining firm performance. For example, Puffer and Weintrop (1991) observed that, after examining a sample of 408 CEOs under the age of retirement, the turnover occurs when reported annual earnings per share fall short of expectation. Therefore, it is common sense to expect the firm's performance to improve after top management

[6] The summaries of related literatures are provided in Appendix 2.2.

is replaced. These replacements are expected to bring new ideas, which may enable the firm to be more adaptive under environmental and economic pressure.

Three sociological views have been expressed regarding the impact of executive succession on organisational performance. The first view states that an individual has the ability to control and improve organisational outcomes. It further suggests that the outside appointment tends to result in the high growth and new improvement, while the inside appointment tends to reflect stability of organisational policies (Grusky, 1963). Helmich (1974) observes an increase in firms' growth following the announcement. Smith *et al.* (1984) carry out similar research on turnover of church. They find that effective leadership is associated with improved church performance. However, there is no relationship between the succession and the improvement or disruption of the organisational performance.

The second view states that the individual has the ability to control outcomes, but in contrast with the first view, organisational performance declines after the replacement. This statement is supported by Grusky (1963) after observing the effect of management turnover on the percentage of the games won by 16 professional sports teams. It was found that the appointment of managerial personnel decreased the team performance. Similar result emerges from Grusky (1964) after the examination of 22 professional baseball teams during 1954-1961 on their performance following mid-season managerial changes. Gamson and Scotch (1964) reaffirmed Grusky (1964)'s conclusion. The suggested reason for this is that the change disrupts the traditional norms of the organisation by setting the condition and developing new policies (Brown, 1982). With the departure of a key official from an organisation, the firm loses unique interpretations of its policy. This may cause changes in the operation and goals of the firms. Also Allen *et al.* (1979) conducted a definitive study of all major league baseball-teams between the year 1920 and 1973 and concluded that the change in management between sporting seasons is associated with a decline in team performance. Although such changes are preceded by inadequate performance, the impact on firm performance is not significant. They further discover that an outside appointment tends to decrease the team performance more than an inside succession.

After analysing 1630 departing executives in US companies during 1965-1989, Murphy and Zimmerman (1993) find a decline in firm performance following the changes of top management. They find that CEOs tend to write-off debts and assets after new management is appointed. This is done through lowering market-adjusted accounting accruals in the years in which the changes occurred. In addition, Pourciau (1993) supports this suggestion by stating that the incoming executive tends to decrease earning in the year of the executive change and increase earnings the following year. This indicates that, although in short term the performance seems to decline, in the long term the firm performance will gradually improve.

The third view states that the individual has no significant influence on organisational performance. This suggestion is supported by the findings of Eitzen and Yetman (1972) who examined the relationship between coaching changes and the winning per centages of 129 college basketball teams between 1930 and 1970. They found that a change in coach had no effect on college basketball teams' performance. Among their results, the authors supported the negative correlation between turnover rate and organisational effectiveness, although the association was weaker than that found for baseball teams by Grusky (1964). Pfeffer (1977) suggests that one reason for such findings is that leadership effectiveness could be limited in large and complex organisations by social and environmental constraints.

In addition, Thomas (1988) proposed that leaders have little impact on organisational performance because they are constrained by other factors, such as environmental factors. Samuelson *et al.* (1985) also find that a change in the leadership position does not significantly affect revenues and rate of return. However, when they further divide the sample into internal and external appointments, they find that the internal successors as well as external successors allow sales growth to slacken relative to firms with continuous management. Opposite effects are found for profitability; internal successors more often improve profitability while the outside successors most often do not. Therefore, it is suggested that outside directors tend to improve short-term solvency, while with the inside directors, the current ratio tends to fluctuate from good to bad. In addition, they also find that new management tends to be more conservative in the first year of holding the position than executives who have been in the office for four or five years. New top mangers are more cautious about incurring

long-term debt or surrendering liquidity. The relative increases in the capital-investment ratios of change corporations is also consistent with behaviours to reduce risk following managerial change, but the frequency of such relative increases is not statistically significant (Samuelson *et al.*, 1985).

Apart from that, when the size of the firm is considered in the analysis, it is found that a significant positive succession effect is present in small firms rather than in larger ones (Reingnum, 1985, Trow, 1961). On the other hand, the outcomes observed in large companies tend to be inconsistent. Lieberson and O'Conner (1972) find that in large companies, leadership has an effect on the company. However, there is a minor lag effect on the firm's performance, such as sales and net earnings. It is suggested that large organisations often have more organisational slack to buffer them from environmental influences, which result in the minimisation of the environmental impact (Weiner and Mohoney, 1987). However, Bonnier and Brunner (1989) found that the size of the firm alone does not have significant effect on the announcement. When cross-sectional analysis is done, the result shows a significant positive interaction between the size and the title of the top management change.

The search for empirical relationships between managerial leadership and organizational performance has also been conducted among business and governmental units. Lieberson and O'Conner (1972), who based their findings on the data for 167 large corporations over the period of twenty years was among the first people who research in this area. Also, Weiner and Majoney (1981) related executive leadership to organizational performance in 193 manufacturing companies. In both studies, an important conclusion is that the impact of executive leadership on organisational performance was less than the effects of environmental and organisational factors.

Weiner and Mahoney (1981) reach conclusions that, basically, are similar to those attained by some of the authors of earlier studies. However, they heavily criticise the methodology employed by Lieberson and O'Conner, correctly noting that the results of this study are dependent upon the sequence in which the variance is allocated to environmental, organisational and leadership factors.

Another research which is carried out in the business organisation is done by Denis and Denis (1995). They analysed a sample of 296 changes in top executives between 1985 and 1988. They found that when all changes of top management is considered, the book value of total assets increased significantly over all measurement periods. The median increases by 4.18 per cent during the three-day announcement period. This change is significant at the 5 per cent. Among their result, they also find that the capital expenditures are reduced in the short-term at 13.2 per cent reduction over the announcement year, which is significant at 1 per cent. However, they noted that in the long-term, the capital expenditure increases.

Pourciau (1993), after examining 73 top executive resignations during the period of 1985-1988, suggests that the incoming executives manage accruals in a way that decrease earnings in the year of the executive change and increases earnings the following year. Furthermore, incoming executives record large write-offs and special items in the year of the management change. However, contrary to expectation, departing executives record accruals and write-offs that decrease against earnings during the last year of holding their positions.

Apart from exploring the studies based in USA, a comparison can be made between different countries. Parallel evidence can be found in Japanese studies. Kang and Shivdasani (1995) examine 174 turnover events experienced by 270 Japanese firms during 1985-1990 and find a negative relation between non-routine top executive turnover likelihood and firm performance. However, the firms with ties to a main bank are more likely to remove top executives for poor earnings performance than the firms without a main bank. This suggests that the main banks and large shareholders also play an important role in the likelihood that a new top executive will be appointed from outside the firm.

Kang and Shivdasani (1995) also find that in the routine turnover, the changes in directors have no significant effect on either the return on assets (-0.17 per cent) or excess stock return (1.31 per cent). However, the nonroutine turnover of directors lead to a significant negative return on assets during the announcement year, whereas insignificant positive excess stock return of 2.76 per cent is observed on the year after the announcement. Apart from that, Kang and Shivdasani (1995) also examine the

outside succession of directors. They observed an insignificant return on assets of –0.68 per cent and an insignificant excess stock return of –4.62 per cent on the announcement year.

Kaplan and Minton (1994) analyse 119 publicly traded Japanese companies and examine the impact of both bank and corporate directors on firm performance. They discovered that changes in top management increases when the companies experience earnings losses. Furthermore, outside appointments are most closely related to stock performance and negative current income. Negative income is associated with an outside appointment in the same and the following year. This suggests that outside appointments are most sensitive to current measures of performance.

Furthermore, Kaplan and Minton (1994) examined the effect of the director change on the firm performance over the long-term. They found that when at least one new director is appointed from the bank, the sales growth shows an insignificant value of -0.57 per cent in the year of the announcement and a significant –2.32 per cent in the following year. An insignificant asset growth of –1.48 per cent is also observed on the announcement year, with a significant value of –3.94 per cent in the year t+1. No significant value of change in pre-tax income to assets are found in the announcement year or the year after with the corresponding values of –0.13 per cent and –0.09 per cent. On the other hand, the pre-tax income to asset shows significant values in both years t and t+1 with the values of –1.90 per cent and 1.99 per cent respectively. Apart from that, they observed a significant negative stock return of –8.21 per cent in the year before the announcement was released, whereas no significant share returns are found on the announcement year or the year that follows.

In addition, Kaplan and Minton (1994) also examine the performance of the firm when at least one new director is appointed from different nonfinanical corporations. Sales growth on the announcement year shows an insignificant value of 0.08 per cent, while a significant sales growth of 2.39 per cent is found in year t+1. A similar outcome is found for asset growth. In the announcement year it is insignificant at 0.59 per cent, but in the year following the announcement it is significant at 2.51 per cent. No significant value is found on the change in pre-tax income to assets with the values of –0.38 per cent observed in the announcement year and 0.02 per cent in year t+1.

Finally, they found that the stock returns show a significant return in the year before the announcement and the year the announcement is made with the associated values of –7.57 per cent and –7.49 per cent. However, in the year following the announcement, an insignificant stock return of 4.19 per cent is reported.

In Germany, turnover of the management board increases significantly with poor stock performance and particularly poor earnings, but is unrelated to sales growth and earning growth. This is found by Kaplan (1994), after studying 42 German companies during 1980-1989. Turnover and appointments of supervisory boards are associated with poor stock performance, but are unrelated to other measures of performance. This suggests that poor stock performance and inability to generate positive income increase the likelihood of top management turnover.

The effect of top management changes on the performance of the firm has been widely investigated in the USA, Japan and Europe. These studies have provided inconclusive results. The finance literature does not provide any evidence on the returns and financial performance of New Zealand companies subsequent to the announcement of changes in top executives in New Zealand boards. In this study, I attempt to fill that gap by observing both of the above issues using New Zealand data.

3 Research Sample and Research Methods

3.1 Introduction

This study examines the effect of changes in top management on the short-term and long-term performance of companies traded on New Zealand Stock Exchange (NZSE). The analysis of short-term performance is associated with the examination of market response to announcements of such changes by companies employing event study methodology. The long-term performance is examined analysing financial performance of these firms before and after the occurrence of such changes employing ordinary least square regressions (OLS).

3.2 Market Response and Share Returns Analysis

This section explains the data collection procedure undertaken and the research methodology employed in the analysis of abnormal returns surrounding the announcement of changes in top management by New Zealand companies.

3.2.1 Sample

This study analyses all announcements made by New Zealand companies during the seven-year period from 1 January 1993 to 31 December 1999. The information on announcements was obtained reading DATEX INFO CD-ROMs stored at the University of Canterbury's library. There were 152 companies which made such announcements during this seven-year period. Table 3.1 compares the number of companies announcing changes in top management with the number of quoted companies on an annual basis.

It was observed that the percentage of quoted companies announcing changes in top management has increased from 16 per cent in 1993 to 22 per cent in 1999. The average change over the seven-year period is around 20 per cent. This may be due to the increasing number of listed companies in the New Zealand Stock Market. On average, one-fifth of New Zealand firms announces a change in top management within a given year.

Table 3.1 Comparison between the number of companies announcing changes in top managers and the companies listed in the share market.

Year	1993	1994	1995	1996	1997	1998	1999	TOTAL
No. of companies announcing changes	30	37	31	47	41	55	48	289
No. of companies listed	189	207	205	204	224	229	218	1476
Per centage	16%	18%	15%	23%	18%	24%	22%	20%

Table 3.2 Stratification of the sample.

Initial Sample	721
Incomplete data	63
Unavailable share price data	15
More than one announcement within the same announcement period	156
Unspecified multiple changes	21
All zero return during the event period	6
Secretary and Vice president changes	7
Top management death	4
Final sample	**449**

An initial sample of 721 announcements of top executive changes was identified. I then excluded 63 cases which had incomplete data, and 15 cases for which share price data were unavailable. A total of 643 remained. Of those, to capture the effect of each individual announcement, 156 cases were further eliminated from the sample as those cases were contaminated due to the announcement of other firm-specific information. After each announcement was read in detail, a further 21 cases were excluded from the sample because multiple changes failed to clearly specify the position of top

management involved. A further six cases were dropped to eliminate the chance of the results being influenced by the outliers as their share returns remained zero during the test period.

Furthermore, as this study identified top management as Chairperson, chief executive officer (CEO), managing director (MD) and director of the board, seven announcements associated with other positions such as secretary and vice president were eliminated from the sample. Once the remaining sample was categorised into different types of changes, I then decided to omit the death announcements of top management as the sample size of four was considered insufficient for further analysis. The summary of the sample stratification is shown in Table 3.2.

Table 3.3 Classification of the announcements on industry groupings.

Code	Industry	No. of Announcements	Per centage
G01	**Primary**	**98**	**22**
	A01 Agriculture & Fishing	39	9
	A02 Mining	25	6
	A03 Forestry & Forest Products	24	5
	A04 Building Material & Construction	10	2
G02	**Energy**	**27**	**6**
G03	**Goods**	**61**	**14**
	A06 Food & Beverage	19	4
	A07 Textiles & Apparel	16	4
	A08 Intermediate & Durable	26	6
G04	**Property**	**14**	**3**
G05	**Services**	**116**	**26**
	A10 Transport	14	3
	A11 Ports	7	2
	A12 Leisure & Tourism	34	8
	A13 Consumer	26	6
	A14 Media & Telecommunications	16	4
	A15 Finance & Other Service	19	4
G06	**Investment**	**31**	**7**
	Fund	**1**	**0**
	Overseas	**44**	**10**
	Not specified.	**57**	**13**
	Total	**449**	**100**

These 449 announcements were gathered from various industries. Table 3.3 shows the number of announcements made by each industry. The companies in services and the primary industries have a higher proportion of announcements of top management changes. On the other hand, energy, property and investment industries seem to have a lower number of announcements of top management changes. This may be due to the lower number of quoted firms in each of these industries.

As prior studies[7] have found that the reaction of the market differs depending on the positions held by the managers, the final sample of 449 announcements of changes is categorised into different top management positions: 84 announcements of CEO/MD changes, 23 announcements of chairperson changes, and 342 announcements of director changes. All the companies used in the final sample, along with the number of announcements, market capitalisation, P/E ratio, dividend yield and turnover are listed in Appendix 3.1.

Within each category of top management change, three sub-categories were detected. They are appointments, resignations and retirements. To examine each type of announcement individually, sub-samples were created for each category. There were 57 appointments, four retirements and 23 resignations under CEO and MD changes. Within the category of chairperson, changes there were 14 appointments, four retirements and five resignations. The changes of directors of the boards consisted of 188 appointments, 43 retirements and 111 resignations.

With respect to appointments, Betty and Zajac (1987) point out that the market response is conditional on whether the appointment is internal or external. Therefore, I decided to divide the samples of top management appointments into insider and outsider appointments. Of 57 CEO and MD appointment announcements, 14 are classified as inside appointments, whereas 43 cases are outside appointments. All the appointments of chairperson and directors are also divided into inside and outside appointments. The inside appointment announcements of these two groups are seven and 19 respectively, whereas the outside appointments are seven and 169 respectively. These detailed classifications are presented in Figure 3.1

[7] See Warner, Watts, and Wruck (1988); Mahajan and Lummer (1993).

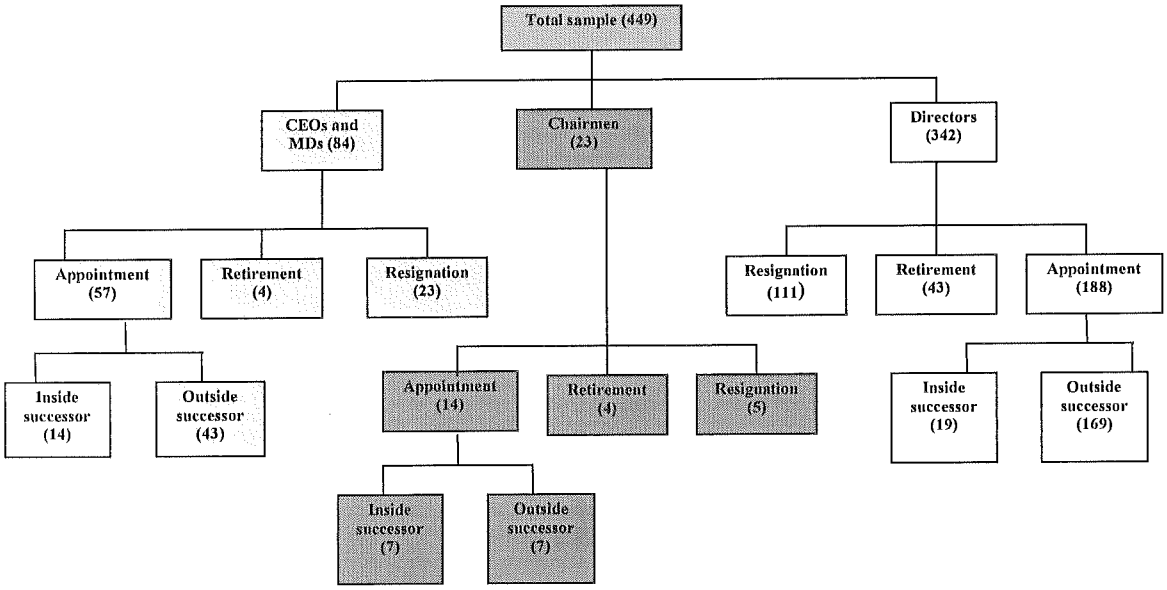

Figure 3.1 Sample stratification on the type of announcement.

3.3 Research Method

Following Strong (1992), the event study is used to determine abnormal return performance surrounding the event of the announcement of change in top management. This method is used because it focuses on the behavior of share prices to test whether their behavior is affected by the disclosure of firm-specific news. This method of analysis captures the full impact of wholly unanticipated events.

The daily share prices and the New Zealand Gross Share Index data are obtained from DATEX 1990-1999 price history CD-ROMs, which are held in the library of the University of Canterbury. The Gross Index will be used because it is already adjusted for dividends and therefore does not fall when shares are quoted ex dividend. Therefore, it should be able to capture the total effect of the announcement on share return.[8]

The logarithmic return model is chosen to calculate share returns because it is more likely to be normally distributed (Strong, 1992). In addition, the daily interval share

[8] *The Fact Book, for the year ended 31 December 1999*, published by NZSE.

price data is used as Morse (1984) recommends shorter measurement interval for better detection of information effects. This argument is also supported by Brown and Warner (1980, 1985). The logarithmic returns equation is as follows:

$$R_{it} \equiv Ln\,(P_{it} / P_{it-1}) \tag{3.1}$$

where R_{it} is the return on share i on day t;
ln is the natural logarithm;
P_{it} is the closing price of share i on day t; and
P_{it-1} is the closing price of share i on day $t-1$.

The daily abnormal return is calculated using the following equation:

$$AR_{it} = R_{it} - E[R_{it}] \tag{3.2}$$

where AR_{it} is the abnormal return on share i on day t;
R_{it} is the actual returns on share i on day t; and
$E[R_{it}]$ is the expected return on share i on day t.

The benchmark chosen to estimate expected return is the market model benchmark, as it makes no explicit assumptions about how equilibrium security prices are established. This expected return is generated using the following equation:

$$E[R_{it}] = \alpha_i + \beta_i R_{mt} \tag{3.3}$$

where α_i is the constant term for share i;
β_i is the sensitivity of the returns on share i to returns on the market; and
R_{mt} is the market return in time period t.

For the estimation of the parameters of the market model, a 200-day estimation period is used. In practice researchers have used a variety of different time lengths to

estimate market model parameters. For example, Lambert and Larcker (1985) used as few as 60 daily observations while Dodd *et al.* (1984) used as many as 600 daily observations. The selection of 200 days as the estimation period in this study was influenced by both having a reasonable number of observations for the estimation of α and β, and data availability. The test period is set at 21 days, beginning 10 days before the announcement date and ending 10 days after it.

After the estimation period is set, the regression is performed to obtain the values of beta and alpha. Then these values are inserted into equation 3.3 to find the daily expected returns during the test period. After that the abnormal return is found using equation 3.2.

After the daily abnormal return for each announcement is found, the SPSS program is used to find the mean and the standard deviation of daily abnormal returns for the test period for each type of announcement. Further, a *t*-test is performed to see whether the average abnormal return across firms is significantly different from zero.

The equation used to perform the *t*-test is as follows:

$$t^* = \frac{\overline{X}}{s\{\overline{X}\}} \tag{3.4}$$

where:

$$s\{\overline{X}\} = \frac{s}{\sqrt{n}} \tag{3.5}$$

where: $\overline{X}$ is the mean abnormal return of the sample;
n is the number of samples of abnormal returns; and
s is the standard deviation of the abnormal returns.

The t^* follows the t distribution with n-1 degrees of freedom. The p-value is found by using the table of t distribution based on the result of t-test.

In addition to the analysis of the daily abnormal returns, the 21-day test period was further divided into ten, two-day horizons. This method of accumulation of abnormal returns is done because it allows the comparison between different two-day periods, before and after the announcement with the abnormal returns of two-day announcement period. The announcement period consists of two days (t and t+1), where t is the day of the first public announcement of top management change, and t+1 is the day immediately following the announcement date. The results of such short-term analysis should capture investors' perceptions about the effects on the firm's future earnings of the event. A popular two-day announcement period is used, although it was recognised by Beatty and Zajac (1987) and Reingnum (1985) that two days may not capture the full market evaluation of the event. After the accumulation of the abnormal returns, the *t*-test is performed on each horizon to find the level of significance.

3.4 Firm Performance analysis

This study further analyses whether the performance of firms can be attributable to changes in top management. However, due to the time constraint faced by the researcher, this analysis was not conducted using the total sample announcements. Instead, I use data for the NZSE40 companies and for 40 other companies randomly selected from NZSE-SC members.

3.4.1 Sample

As already mentioned, the sample is compiled using all the NZSE40 companies and 40 randomly selected from NZSE-SC[9] companies. Descriptive information on these two samples is provided in Appendix 3.2. Table 3.4 reports the number of top management changes made by these two groups during the sampling period from 1 January 1993 to 31 December 1999.

[9] NZSE-SC is the index which represents all the companies which are not included in NZSE40 index.

Table 3.4 Top management changes.

Year	NZSE-40	NZSE-SCI (40 Companies)	Total
1993	9	15	24
1994	13	15	28
1995	16	13	29
1996	30	25	55
1997	27	12	39
1998	39	17	56
Total	134	97	231

I observe financial performance across three years (year t–1 to year t+1). The announcements that occurred in 1999 were excluded, as the financial data for 2000 did not exist at the time of analysis.

3.4.2 Research Method

Ordinary least square regression is used in this study to determine the effect of the appointment of outside directors on firms' performance. This method has been widely used by many researchers, including Kaplan and Minton (1994). This method limits the analysis to its basic form of two-group discriminant analysis. In this study the two groups are the firms making changes in top management and the firms not making such changes within a given year. This method is adopted because this study employs the non-metric variable (0 or 1), such as dummy-variable coding for changes in top management.

The ordinary least square regression uses an assumed relationship between the independent and dependent variables that resembles a straight line (Hair *et al.*, 1995). It is a method that minimises the sum of the squared difference between the actual and predicted values of the dependent variable. The ordinary least square regression takes the following form.

$$z = \alpha + \beta X \tag{3.6}$$

where z is the financial data variable.

α is the intercept;

β is the weight for the independent variable; and

X is the dummy-variable code of change in top management

Five aspects of firm performance are studied: (1) share returns, (2) sales, (3) earnings, (4) financial status and (5) financing policies. The returns' performance is studied using company stock returns. Sales growth is used to analyse sales performance. Change in pre-tax income as a fraction of total assets is used to capture earnings. Financing policies are studied using debt ratio and interest coverage ratio. Financial status is examined using quick asset ratio. The definitions of these variables are presented in Appendix 3.3

SPSS statistic software is used to carry out the ordinary least square regression of top management changes as a function of firm performance. A separate regression is run for each performance measure. All regressions include year dummy variables intended to control for economy- or market-wide shocks that vary over time (see Kaplan and Minton, 1994). Therefore, the performance variable should be interpreted as performance relative to the average for all firms in a particular year. The *t*-test was used to test the level of significance of the coefficients produced by ordinary least square regression.

4 Event Study Results

4.1 Introduction

A change in top management is believed to have an important impact on a firm's future performance (Lubatkin *et al.*, 1988; Mahajan and Lummer, 1993). It is believed that this impact can be captured by examining share returns around the time when such announcements are made. This chapter reports the results of the event study analyses conducted to test the market response to announcements of changes in top management. The event study involved a total sample of 449 top management changes announced between 1993 and 1999 by New Zealand companies.

The results of this study are presented in the following order. The results of all the announcements of top management changes made are presented in the next section. Then, these changes are divided into three groups – (1) chief executive officers (CEO) and managing directors (MD), (2) chairpersons and (3) directors – and findings are discussed in sections three, four and five respectively. Within each section, market response to appointments, resignations and retirements are analysed individually. For analytical purposes, the two-day period consisting of announcement day (day t) and the day following the announcement day (day t+1) is designated as the announcement period in this study.

4.2 All top management change announcements

As top managers are believed to have a certain degree of influence on a firm's policies and decision making, the effects of changes in top management, such as the CEO, chairpersons or directors are expected to be reflected in the movement of share prices

(Reingnum, 1985). This section examines the market's response to the announcement of a mixture of top management changes. Table 4.1 reports the findings.

In Table 4.1, Panel A shows the daily abnormal returns for 449 announcements of top management changes by all New Zealand's listed companies from 1993-1999. This study observes insignificant positive abnormal returns of 0.35 per cent and 0.07 per cent respectively, on the day the announcement is released to the market and the day after. Although the standard deviation on day t is slightly higher than that for the surrounding days, no significant price movements are observed during the announcement period. Also, the proportions of positive and negative abnormal returns are found to be similar to each other.

The grouping of abnormal returns into two-day intervals in Panel B also shows the same picture. It is found that majority of the two-day portfolios show no sign of significant effect as a result of the change in top managers announcements. During the two-day announcement period (day t to t+1), an insignificant abnormal return of 0.42 per cent is observed.

The results found in this study are consistent with the study done by Mahajan and Lummer (1993), who examined 498 announcements by US corporations, and found insignificant two-day excess returns of –0.02 per cent. However, the result of this study contrasts with the significantly positive abnormal returns found by Rosenstein and Wyatt (1990), Bonnier and Bruner (1989), and Furtado and Rozeff (1987). Furthermore, the insignificant results found in this study also contradict the positive abnormal returns found for the UK companies by Dahya (1993). In addition, this study also lends no support to Betty and Zajac (1987), who found negative returns during the announcement period.

Table 4.1 Mean abnormal returns associated with top management changes: All announcements.

A. Daily abnormal return							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0023	-0.8149	0.0598	-1.1308	0.1866	49.2	50.8
t-9	-0.0017	-0.4592	0.0798	-1.1531	0.2538	49.9	50.1
t-8	-0.0061	-1.4460*	0.0895	-1.3792	0.2250	45.2	54.8
t-7	0.0019	0.3857	0.1067	-1.1529	1.6758	53.5	46.5
t-6	-0.0117	-0.8267	0.2995	-6.1808	0.3083	50.1	49.9
t-5	0.0044	0.6390	0.1454	-1.1129	2.7675	51.5	48.5
t-4	0.0016	0.3680	0.0922	-1.0668	1.4851	48.8	51.2
t-3	0.0011	0.2073	0.1104	-1.0886	1.9282	50.6	49.4
t-2	0.0029	0.6669	0.0932	-1.0571	1.5351	52.3	47.7
t-1	-0.0063	-1.1944	0.1124	-2.0273	0.2452	50.6	49.4
t	0.0035	0.8286	0.0899	-1.1408	1.2703	46.5	53.5
t+1	0.0007	0.2046	0.0746	-1.1453	0.7904	50.8	49.2
t+2	-0.0008	-0.2559	0.0654	-1.1501	0.2494	48.1	51.9
t+3	-0.0067	-1.0329	0.1383	-2.5335	0.5840	47.0	53.0
t+4	-0.0035	-1.2346	0.0608	-1.1180	0.2001	45.9	54.1
t+5	-0.0010	-0.3461	0.0614	-1.1415	0.2698	51.7	48.3
t+6	0.0027	0.4363	0.1321	-1.1293	2.4657	51.9	48.1
t+7	-0.0029	-0.8086	0.0770	-1.1383	0.5426	47.9	52.1
t+8	-0.0073	-1.6509**	0.0940	-1.5425	0.1955	46.1	53.9
t+9	-0.0065	-1.4449*	0.0958	-1.4131	0.5428	44.1	55.9
t+10	-0.0011	-0.3243	0.0707	-1.1262	0.7845	49.2	50.8

B. the two-day cumulative AR portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0040	-0.6760	0.1263	-2.2839	0.3143	48.3	52.6
t-8 to t-7	-0.0042	-0.7167	0.1232	-2.2713	0.3769	48.8	61.4
t-6 to t-5	-0.0073	-0.7740	0.1999	-3.4133	0.4038	51.0	49.1
t-4 to t-3	0.0027	0.2880	0.1972	-2.1554	3.4132	48.3	52.6
t-2 to t-1	-0.0034	-0.6449	0.1117	-2.0731	0.4777	52.3	38.6
t to t+1	0.0042	0.5792	0.1550	-2.2861	2.0607	48.3	45.6
t+2 to t+3	-0.0075	-0.9411	0.1695	-2.4293	0.5749	47.4	56.1
t+4 to t+5	-0.0045	-0.8378	0.1149	-2.2596	0.3702	47.2	50.9
t+6 to t+7	-0.0002	-0.0325	0.1420	-2.2676	1.6708	49.2	43.9
t+8 to t+9	-0.0139*	-1.5997	0.1835	-2.9556	0.5431	43.9	63.2

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 449 announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is *t*-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

4.3 Announcements of change in CEO and MD

4.3.1 All CEO and MD change announcements

The daily abnormal returns of all 84 CEO and MD changes announcements made by New Zealand companies are presented in Panel A of Table 4.2. The result in this study shows that the mean abnormal returns around the announcement day are insignificant. The abnormal returns for day t is 0.26 per cent and it is 0.19 per cent for the day t+1. None of the pre-announcement period abnormal returns are significant. However, four post-announcement days have significant returns. The other measures observed – standard deviation, minimum return and maximum return and positive and negative proportions – also do not provide any evidence of significant price movements during the announcement period.

When considering two-day return portfolios, Panel B in Table 4.2 also shows no significant abnormal returns throughout the period. However, the majority of two-day portfolios representing this 21-day period show positive values. During the two-day announcement period, the insignificant abnormal return of 0.45 per cent is reported, with the highest standard deviation observed during the test period.

The result of insignificant abnormal returns during the announcement period is consistent with Betty and Zajac (1987) and Mahajan and Lummer (1993). However, it contradicts with the result found by Warner *et al.* (1988). They find a negative abnormal return of –0.026 per cent in their US study, which contained 92 CEO changes. The result of the insignificant abnormal returns in this study is also inconsistent with the positive and significant abnormal returns found by Weisbach (1988) and Dahya (1993).

4.3.2 All Appointments of CEO and MD announcements

There are different effects of the CEO and MD announcement on the shareholders' wealth found in prior studies. However, after analysis of share returns of 57 CEO and

MD appointment announcements, it is found, as shown in Panel A in Table 4.3, that the abnormal returns on the day of the announcement and day t+1 are 0.66 per cent and 0.33 per cent respectively. However, they are insignificant. It is also important to note that, on both days of the announcement period, the majority of companies earned negative abnormal returns. When the two-day return intervals are considered, there is no sign of significant effect of CEO and MD appointments on the share return throughout the 21-day period. The periodic abnormal returns are insignificant for the entire test period. It is insignificantly positive at 0.99 per cent during the announcement period.

The effects of the CEO and MD changes announcement on the share returns of this study support the research carried out by Betty and Zajac (1987). However, this finding of insignificant abnormal return contrasts with the conclusion made by Furtado (1986), who reported a significant abnormal return of 0.42 per cent after examining 1,406 appointments of CEOs in US companies. Apart from that, the result of this study also lends no support to Lubatkin *et al.* (1989), who suggest that investors typically seem to revise their expectations of cash flows downward during the time surrounding a new appointment announcement and thus companies report negative abnormal returns.

4.3.3 Inside CEO and MD appointments

After the examination of the share returns of 14 inside CEO and MD appointment announcements made by the New Zealand listed companies during 1993-1999, Panel A of Table 4.4 reports a significant positive abnormal return of 1.22 per cent on the announcement day (*t*-statistic of 1.4267). The proportion of firms reporting positive abnormal returns is only 42.9 per cent. These companies earned a further positive abnormal return of 0.13 per cent on day t+1. However, the majority of companies earned negative abnormal returns on both these days. The announcement period standard deviation is relatively low compared to the standard deviations of the pre-announcement days.

Although this study observes a significant positive abnormal return on the announcement day, there is no sign of significant influence by the appointment of inside CEOs and MDs on share returns when 2-day portfolio periods are considered. During the two-day announcement period, the abnormal return of 1.36 per cent is found compared to the –0.21 per cent and 2.48 per cent reported for the two two-day intervals before and following the announcement period. It should also be noted that the proportion of firms reporting positive and negative abnormal returns average around 50 per cent for each two-day period.

The result of the insignificant two-day portfolio return found in this study contrasts with the result observed by Betty and Zajac (1989), who find a sharp decline in the value of the firms. It also shows an inconsistency with Lubatkin *et al.* (1989), who also find that the investors' expectation of the future performance of the firm is negative. However, it is important to note that the sample of inside CEO and MD appointment announcements used in this study is smaller than that used in prior studies.

4.3.4 Outside CEO and MD appointment announcement

A sample of 43 outside CEO and MD appointment announcements was examined in this study. Table 4.5 reports the results. In Panel A of the table, the abnormal returns found on day t and day t+1 are insignificant, with values of 0.48 per cent and 0.39 per cent respectively. Only 46.5 per cent of the firms show a positive abnormal return on the announcement day, whereas a slightly higher proportion of firms (51.2 per cent) report positive returns on day t+1. Apart from that, the highest daily standard deviation of 0.0419 is also reported on day t.

Panel B in Table 4.5 shows the two-day returns for the 21-day test period. The two-day announcement period shows a positive, however, insignificant abnormal return of 0.87 per cent, with a highest standard deviation of 0.0560. However, two periods prior to the announcement period show significant positive abnormal returns of 0.93 per cent and 0.72 per cent respectively. This may be because of leakage of information to the market before the official announcement day. Apart from that, during the period

following the announcement, this study observed a significant negative abnormal return of –1.13 per cent with a *t*-statistic of –1.5505 for the two-day period covering t+2 and t+3. Furthermore, in Panel B, a significant abnormal return of 0.67 per cent is found for days t+6 and t+7. The insignificant abnormal return found during the announcement period is inconsistent with Lubatkin *et al.* (1989), who find the outside appointment to have a positive and significant effect on investors' expectations.

4.3.5 Resignation of the CEO and MD announcement

A sample of 23 CEO and MD resignation announcements was used to analyse the effect of such news on the share returns. Panel A in Table 4.6 shows the daily abnormal returns of this analysis. It shows an insignificant abnormal return of –0.87 per cent on the announcement day. A further negative abnormal return of –0.27 per cent is found for the day t+1, which is also insignificant. The standard deviation reported on the announcement day was 0.0414, with 60 per cent of firms reporting negative abnormal returns. Apart from that, it can be noted that on days t-3 and t+3 the abnormal returns are significantly positive at 1.05 per cent and 0.87 per cent respectively.

Similar results are reported for two-day intervals in Panel B. The only significant abnormal return is reported from day t-4 to t-3, with a value of 1.45 per cent. The announcement period abnormal return of –1.13 per cent is insignificant. Similarly, insignificant abnormal returns are also found during the periods immediately before and after the announcement period.

The insignificant abnormal return found during the announcement period is consistent with Weisbach (1988), who examines 286 resignation announcements of CEOs, and Mahajan and Lummer (1993), who examine 100 mandatory retirements. Both these studies find that these events do not have any significant impact on share returns.

4.3.6 Retirement of CEO and MD announcement

It has been suggested that investors should anticipate retirement announcements. Therefore, there should be no significant effect on the share returns around the day of the announcement. Panel A in Table 4.7 shows the results of the share returns of 4 CEO and MD retirement announcements in New Zealand listed companies. This study finds an abnormal return on the announcement day of 1.06 per cent which is insignificant. A relatively high standard deviation of 0.0343 is observed on this day, with 75 per cent of the firms reporting positive abnormal returns. However, on the day before the official release of the announcement, a significant positive abnormal return of 1.34 per cent is found, with an associated *t*-statistic of 1.6521. The day t+1 shows a positive but insignificant abnormal return of 0.82 per cent. Besides the day t-1, this study also observes a significant negative abnormal return of -3.60 per cent with *t*-statistic of –1.6861 on day t-2.

In Panel B, the abnormal return of 1.88 per cent found during the announcement period is insignificant. Similar results are found during the period before and immediately following the announcement. The abnormal returns for the two-day periods preceding and following the announcement period are 2.26 per cent and 2.05 per cent respectively. In addition, the highly significant abnormal return of 2.77 per cent is found during the period covering days t+6 to t+7, with a *t*-statistic of 3.4890.

The significant abnormal return found on the day t-1 is consistent with Dahya (1993), who examines non-mandatory retirement and obtaines a significant abnormal return of 0.58 per cent on the same day. It is suggested that this could be influenced by early leakage of information in the market. However, it should also be noted that this result might be influenced by the small sample size used in this analysis.

Table 4.2 Mean abnormal returns associated with CEO and MD changes: All changes.

A. Daily Mean abnormal returns							
Day	AR	*t*-test	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0009	0.5490	0.0144	-0.0509	0.0513	56.0	44.0
t-9	0.0031	0.9011	0.0311	-0.0634	0.2251	45.2	54.8
t-8	-0.0032	-0.9412	0.0307	-0.1637	0.0851	44.0	56.0
t-7	-0.0040	-1.2258	0.0297	-0.1769	0.0928	48.8	51.2
t-6	0.0036	0.8449	0.0390	-0.0809	0.2507	51.2	48.8
t-5	-0.0007	-0.2305	0.0294	-0.1377	0.1217	46.4	53.6
t-4	0.0017	0.3879	0.0395	-0.1650	0.1902	51.2	48.8
t-3	0.0043	1.2189	0.0323	-0.0816	0.1864	56.0	44.0
t-2	0.0025	0.7744	0.0301	-0.1050	0.1334	59.5	40.5
t-1	-0.0012	-0.2837	0.0385	-0.2439	0.1260	52.4	47.6
t	0.0026	0.6010	0.0400	-0.1619	0.2320	45.2	54.8
t+1	0.0019	0.6146	0.0279	-0.0762	0.1364	47.6	52.4
t+2	-0.0046	-1.4365*	0.0296	-0.1514	0.0537	45.2	54.8
t+3	0.0058	1.4904*	0.0355	-0.1123	0.2096	48.8	51.2
t+4	-0.0025	-0.8157	0.0285	-0.1753	0.0654	45.2	54.8
t+5	0.0051	1.9715**	0.0237	-0.0338	0.1083	56.0	44.0
t+6	0.0019	0.5664	0.0310	-0.0974	0.1938	52.4	47.6
t+7	0.0011	0.3174	0.0311	-0.1751	0.0690	48.8	51.2
t+8	-0.0058	-1.8595**	0.0284	-0.1410	0.0654	40.5	59.5
t+9	-0.0005	-0.1754	0.0275	-0.1006	0.0912	53.6	46.4
t+10	0.0036	1.2478	0.0268	-0.0864	0.1168	54.8	45.2

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0039	0.7698	0.0334	-0.0613	0.2319	46.4	52.6
t-8 to t-7	-0.0071	-1.0885	0.0429	-0.1740	0.1087	41.7	61.4
t-6 to t-5	0.0029	0.5353	0.0349	-0.0830	0.1632	51.2	49.1
t-4 to t-3	0.0060	0.8743	0.0447	-0.1580	0.2044	50.0	52.6
t-2 to t-1	0.0014	0.2052	0.0432	-0.2427	0.1250	59.5	38.6
t to t+1	0.0045	0.5171	0.0570	-0.1864	0.3212	51.2	45.6
t+2 to t+3	0.0011	0.1433	0.0520	-0.2343	0.2629	46.4	56.1
t+4 to t+5	0.0026	0.4652	0.0361	-0.1648	0.1007	53.6	50.9
t+6 to t+7	0.0030	0.4898	0.0401	-0.1760	0.1621	53.6	43.9
t+8 to t+9	-0.0063	-1.2495	0.0329	-0.1239	0.0755	41.7	63.2

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of all 84 CEO and MD announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.3 Mean abnormal returns associated with CEO and MD changes: All appointments announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0016	0.7552	0.0155	-0.0509	0.0513	55.6	44.4
t-9	0.0034	0.7007	0.0364	-0.0634	0.2251	38.9	61.1
t-8	-0.0026	-0.6328	0.0314	-0.1637	0.0851	38.9	61.1
t-7	-0.0066	-1.7407	0.0288	-0.1769	0.0305	46.3	53.7
t-6	0.0032	0.5441	0.0444	-0.0809	0.2507	48.1	51.9
t-5	-0.0017	-0.4508	0.0293	-0.1377	0.0809	40.7	59.3
t-4	0.0014	0.3014	0.0363	-0.1650	0.1867	46.3	53.7
t-3	0.0022	0.4836	0.0341	-0.0816	0.1864	46.3	53.7
t-2	0.0082	2.2358	0.0277	-0.0573	0.1334	64.8	35.2
t-1	-0.0031	-0.5277	0.0439	-0.2439	0.1260	50.0	50.0
t	0.0066	1.2635	0.0396	-0.0638	0.2320	42.6	57.4
t+1	0.0033	0.8946	0.0274	-0.0628	0.1364	44.4	55.6
t+2	-0.0066	-1.5801*	0.0316	-0.1514	0.0532	40.7	59.3
t+3	0.0042	0.8206	0.0384	-0.1123	0.2096	42.6	57.4
t+4	-0.0007	-0.2655	0.0207	-0.0544	0.0654	38.9	61.1
t+5	0.0046	1.4219*	0.0243	-0.0338	0.1083	51.9	48.1
t+6	0.0056	1.2517	0.0336	-0.0974	0.1938	53.7	46.3
t+7	-0.0005	-0.1175	0.0315	-0.1751	0.0458	48.1	51.9
t+8	-0.0058	-1.5283*	0.0286	-0.1410	0.0654	37.0	63.0
t+9	-0.0030	-0.9496	0.0236	-0.0884	0.0455	50.0	50.0
t+10	0.0020	0.6060	0.0243	-0.0864	0.0750	48.1	51.9

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0049	0.9604	0.0388	-0.0613	0.2319	47.4	52.6
t-8 to t-7	-0.0093	-1.6377	0.0427	-0.1740	0.0929	38.6	61.4
t-6 to t-5	0.0015	0.3490	0.0314	-0.0830	0.1130	50.9	49.1
t-4 to t-3	0.0036	0.6169	0.0445	-0.1580	0.2044	47.4	52.6
t-2 to t-1	0.0051	0.8726	0.0443	-0.2427	0.1250	61.4	38.6
t to t+1	0.0099	1.2842	0.0581	-0.0749	0.3212	54.4	45.6
t+2 to t+3	-0.0024	-0.3116	0.0590	-0.2343	0.2629	43.9	56.1
t+4 to t+5	0.0038	0.8563	0.0339	-0.0684	0.1007	49.1	50.9
t+6 to t+7	0.0051	0.9312	0.0411	-0.1760	0.1621	56.1	43.9
t+8 to t+9	-0.0088	-2.3061	0.0287	-0.1239	0.0475	36.8	63.2

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of all 57 appointment of CEO and announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t represents the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.4 Mean abnormal returns associated with CEO and MD changes: Inside appointments announcement.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0032	1.1845	0.0102	-0.0136	0.0231	57.1	42.9
t-9	0.0036	0.2012	0.0662	-0.0634	0.2251	28.6	71.4
t-8	-0.0104	-0.8128	0.0480	-0.1637	0.0575	35.7	64.3
t-7	0.0008	0.1868	0.0151	-0.0334	0.0305	57.1	42.9
t-6	0.0279	1.3668*	0.0764	-0.0232	0.2507	57.1	42.9
t-5	-0.0205	-1.9457**	0.0395	-0.1377	0.0163	14.3	85.7
t-4	-0.0102	-0.8167	0.0465	-0.1650	0.0297	50.0	50.0
t-3	-0.0035	-0.7051	0.0185	-0.0548	0.0265	50.0	50.0
t-2	0.0169	2.2355**	0.0282	-0.0089	0.0977	64.3	35.7
t-1	-0.0181	-0.9924	0.0683	-0.2439	0.0430	35.7	64.3
t	0.0122	1.4267*	0.0321	-0.0126	0.0978	42.9	57.1
t+1	0.0013	0.1118	0.0447	-0.0628	0.1364	35.7	64.3
t+2	0.0018	0.2616	0.0253	-0.0366	0.0532	50.0	50.0
t+3	0.0230	1.3966*	0.0616	-0.0264	0.2096	57.1	42.9
t+4	0.0017	0.2572	0.0247	-0.0362	0.0654	42.9	57.1
t+5	0.0012	0.2450	0.0184	-0.0320	0.0301	64.3	35.7
t+6	0.0115	0.7888	0.0545	-0.0316	0.1938	35.7	64.3
t+7	-0.0114	-0.8388	0.0509	-0.1751	0.0431	35.7	64.3
t+8	-0.0118	-1.0473	0.0422	-0.1410	0.0342	50.0	50.0
t+9	-0.0025	-0.6668	0.0143	-0.0317	0.0171	42.9	57.1
t+10	0.0024	0.5865	0.0151	-0.0239	0.0296	57.1	42.9

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0068	0.3756	0.0677	-0.0613	0.2319	28.6	71.4
t-8 to t-7	-0.0097	-0.7030	0.0515	-0.1693	0.0479	50.0	50.0
t-6 to t-5	0.0074	0.6911	0.0399	-0.0310	0.1130	42.9	57.1
t-4 to t-3	-0.0136	-1.0599	0.0482	-0.1580	0.0379	50.0	50.0
t-2 to t-1	-0.0012	-0.0612	0.0762	-0.2427	0.0784	57.1	42.9
t to t+1	0.0136	0.7677	0.0662	-0.0630	0.2020	50.0	50.0
t+2 to t+3	0.0248	1.1423	0.0811	-0.0397	0.2629	50.0	50.0
t+4 to t+5	0.0029	0.3194	0.0340	-0.0681	0.0662	57.1	42.9
t+6 to t+7	0.0001	0.0040	0.0697	-0.1760	0.1621	50.0	50.0
t+8 to t+9	-0.0144	-1.4777*	0.0364	-0.1239	0.0171	35.7	64.3

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 14 inside appointment of CEO and MD announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.5 Mean abnormal returns associated with CEO and MD changes: Outside appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0010	0.3878	0.0169	-0.0509	0.0513	58.1	41.9
t-9	0.0033	1.0714	0.0203	-0.0473	0.0622	46.5	53.5
t-8	-0.0001	-0.0271	0.0241	-0.0481	0.0851	44.2	55.8
t-7	-0.0090	-1.8665**	0.0318	-0.1769	0.0216	44.2	55.8
t-6	-0.0048	-1.3509*	0.0235	-0.0809	0.0386	48.8	51.2
t-5	0.0044	1.2745	0.0225	-0.0286	0.0809	53.5	46.5
t-4	0.0052	1.0701	0.0320	-0.0333	0.1867	48.8	51.2
t-3	0.0040	0.6990	0.0378	-0.0816	0.1864	48.8	51.2
t-2	0.0054	1.2935	0.0272	-0.0573	0.1334	67.4	32.6
t-1	0.0018	0.3760	0.0320	-0.1373	0.1260	58.1	41.9
t	0.0048	0.7506	0.0419	-0.0638	0.2320	46.5	53.5
t+1	0.0039	1.2981	0.0196	-0.0283	0.0892	51.2	48.8
t+2	-0.0093	-1.8462**	0.0331	-0.1514	0.0380	41.9	58.1
t+3	-0.0020	-0.5135	0.0251	-0.1123	0.0489	41.9	58.1
t+4	-0.0015	-0.5100	0.0195	-0.0544	0.0351	44.2	55.8
t+5	0.0057	1.4298**	0.0260	-0.0338	0.1083	51.2	48.8
t+6	0.0036	1.0007	0.0238	-0.0974	0.0528	62.8	37.2
t+7	0.0031	0.9287	0.0216	-0.0492	0.0458	55.8	44.2
t+8	-0.0038	-1.0977	0.0228	-0.0596	0.0654	37.2	62.8
t+9	-0.0031	-0.7817	0.0261	-0.0884	0.0455	55.8	44.2
t+10	0.0018	0.4451	0.0268	-0.0864	0.0750	48.8	51.2

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0043	1.1746	0.0241	-0.0542	0.0939	53.5	46.5
t-8 to t-7	-0.0091	-1.4914*	0.0402	-0.1740	0.0929	34.9	65.1
t-6 to t-5	-0.0005	-0.1098	0.0284	-0.0830	0.0944	53.5	46.5
t-4 to t-3	0.0093	1.4367*	0.0423	-0.0552	0.2044	46.5	53.5
t-2 to t-1	0.0072	1.6642*	0.0284	-0.0372	0.1250	62.8	37.2
t to t+1	0.0087	1.0158	0.0560	-0.0749	0.3212	55.8	44.2
t+2 to t+3	-0.0113	-1.5505*	0.0478	-0.2343	0.0535	41.9	58.1
t+4 to t+5	0.0042	0.7946	0.0343	-0.0684	0.1007	46.5	53.5
t+6 to t+7	0.0067	1.6134*	0.0272	-0.0595	0.0782	58.1	41.9
t+8 to t+9	-0.0069	-1.7527**	0.0259	-0.0789	0.0475	37.2	62.8

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 43 outside appointment of CEO and MD announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.6 Mean abnormal returns associated with CEO and MD changes: Resignation announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0006	0.2404	0.0112	-0.0148	0.0311	52.2	47.8
t-9	0.0011	0.3628	0.0147	-0.0335	0.0414	47.8	52.2
t-8	-0.0031	-0.5070	0.0294	-0.0908	0.0739	47.8	52.2
t-7	-0.0008	-0.1254	0.0288	-0.0617	0.0928	47.8	52.2
t-6	0.0047	0.8493	0.0265	-0.0489	0.0822	47.8	52.2
t-5	0.0019	0.2726	0.0327	-0.0569	0.1217	47.8	52.2
t-4	0.0041	0.4191	0.0466	-0.0751	0.1902	56.5	43.5
t-3	0.0105	1.6876*	0.0298	-0.0410	0.1027	69.6	30.4
t-2	-0.0048	-0.8013	0.0285	-0.1050	0.0211	52.2	47.8
t-1	0.0009	0.1792	0.0246	-0.0748	0.0431	47.8	52.2
t	-0.0087	-1.0027	0.0414	-0.1619	0.0421	39.1	60.9
t+1	-0.0027	-0.4264	0.0300	-0.0762	0.0906	43.5	56.5
t+2	-0.0002	-0.0481	0.0249	-0.0655	0.0537	47.8	52.2
t+3	0.0087	1.4596*	0.0287	-0.0310	0.1219	56.5	43.5
t+4	-0.0092	-1.0601	0.0416	-0.1753	0.0300	43.5	56.5
t+5	0.0055	1.1238	0.0233	-0.0317	0.0698	56.5	43.5
t+6	-0.0057	-1.1551	0.0237	-0.0721	0.0594	43.5	56.5
t+7	-0.0007	-0.1215	0.0293	-0.0791	0.0690	34.8	65.2
t+8	-0.0059	-0.9714	0.0294	-0.1061	0.0373	39.1	60.9
t+9	0.0042	0.5754	0.0354	-0.1006	0.0912	52.2	47.8
t+10	0.0031	0.6141	0.0245	-0.0515	0.0881	56.5	43.5

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0017	0.4910	0.0164	-0.0244	0.0435	43.5	56.5
t-8 to t-7	-0.0039	-0.3915	0.0473	-0.1011	0.1087	43.5	56.5
t-6 to t-5	0.0065	0.6895	0.0455	-0.0823	0.1632	47.8	52.2
t-4 to t-3	0.0145	1.5166*	0.0460	-0.0527	0.1513	56.5	43.5
t-2 to t-1	-0.0038	-0.4875	0.0377	-0.1058	0.0642	56.5	43.5
t to t+1	-0.0113	-0.9868	0.0550	-0.1864	0.1016	39.1	60.9
t+2 to t+3	0.0085	1.1738	0.0346	-0.0350	0.1165	47.8	52.2
t+4 to t+5	-0.0037	-0.4201	0.0427	-0.1648	0.0554	56.5	43.5
t+6 to t+7	-0.0064	-0.7938	0.0389	-0.0747	0.1253	39.1	60.9
t+8 to t+9	-0.0017	-0.1919	0.0425	-0.1039	0.0755	47.8	52.2

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 23 resignation of CEO and MD announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.7 Mean abnormal returns associated with CEO and MD changes: Retirement announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0072	-0.8869	0.0162	-0.0312	0.0026	50.0	50.0
t-9	0.0097	1.0419	0.0186	-0.0014	0.0374	75.0	25.0
t-8	-0.0109	-0.6141	0.0353	-0.0624	0.0177	50.0	50.0
t-7	0.0155	0.6694	0.0462	-0.0172	0.0836	50.0	50.0
t-6	0.0029	1.1185	0.0051	0.0001	0.0105	100.0	0.0
t-5	-0.0013	-0.3581	0.0073	-0.0120	0.0042	75.0	25.0
t-4	-0.0090	-0.3629	0.0495	-0.0645	0.0480	50.0	50.0
t-3	-0.0013	-0.2119	0.0120	-0.0189	0.0072	75.0	25.0
t-2	-0.0360	-1.6861*	0.0427	-0.0961	-0.0036	0.0	100.0
t-1	0.0134	1.6521*	0.0162	-0.0018	0.0358	75.0	25.0
t	0.0106	0.6152	0.0343	-0.0333	0.0449	75.0	25.0
t+1	0.0082	0.6796	0.0242	-0.0123	0.0433	75.0	25.0
t+2	-0.0019	-0.1280	0.0298	-0.0402	0.0284	50.0	50.0
t+3	0.0118	0.6566	0.0359	-0.0198	0.0442	50.0	50.0
t+4	0.0101	0.6146	0.0328	-0.0363	0.0401	75.0	25.0
t+5	0.0104	0.9445	0.0221	-0.0128	0.0400	75.0	25.0
t+6	-0.0062	-0.4574	0.0273	-0.0354	0.0239	50.0	50.0
t+7	0.0339	3.0716**	0.0221	0.0021	0.0527	100.0	0.0
t+8	-0.0042	-0.3213	0.0263	-0.0309	0.0287	50.0	50.0
t+9	0.0069	0.4607	0.0301	-0.0286	0.0385	50.0	50.0
t+10	0.0306	1.0641	0.0575	0.0004	0.1168	100.0	0.0

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0025	0.1728	0.0289	-0.0304	0.0396	50.0	50.0
t-8 to t-7	0.0046	0.7222	0.0128	-0.0095	0.0211	75.0	25.0
t-6 to t-5	0.0016	1.2964	0.0024	-0.0015	0.0043	75.0	25.0
t-4 to t-3	-0.0102	-0.4774	0.0429	-0.0631	0.0291	50.0	50.0
t-2 to t-1	-0.0226	-0.8100	0.0559	-0.0979	0.0281	50.0	50.0
t to t+1	0.0188	0.8415	0.0446	-0.0327	0.0725	75.0	25.0
t+2 to t+3	0.0099	1.2067	0.0164	-0.0065	0.0323	75.0	25.0
t+4 to t+5	0.0205	1.7433*	0.0235	0.0007	0.0514	100.0	0.0
t+6 to t+7	0.0277	3.4890**	0.0159	0.0078	0.0464	100.0	0.0
t+8 to t+9	0.0027	0.1667	0.0325	-0.0369	0.0425	75.0	25.0

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 4 retirement of CEO and MD announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

4.3.7 Comparison between different type of CEO and MD announcement.

The earlier sections examined the effects of different types of CEO and MD announcements on share returns individually. This section advances the analysis further by making comparisons between the effect of appointment, resignation and retirement announcements on the share returns.

Figure 4.1 plots the cumulative daily abnormal return of each type of announcement over a 21-day test period. This graph shows that the cumulative abnormal return of retirement of CEO and MD announcements rose steadily after the announcements was made. On the other hand, lower returns were reported for the announcement of appointment and resignation of CEOs and MDs.

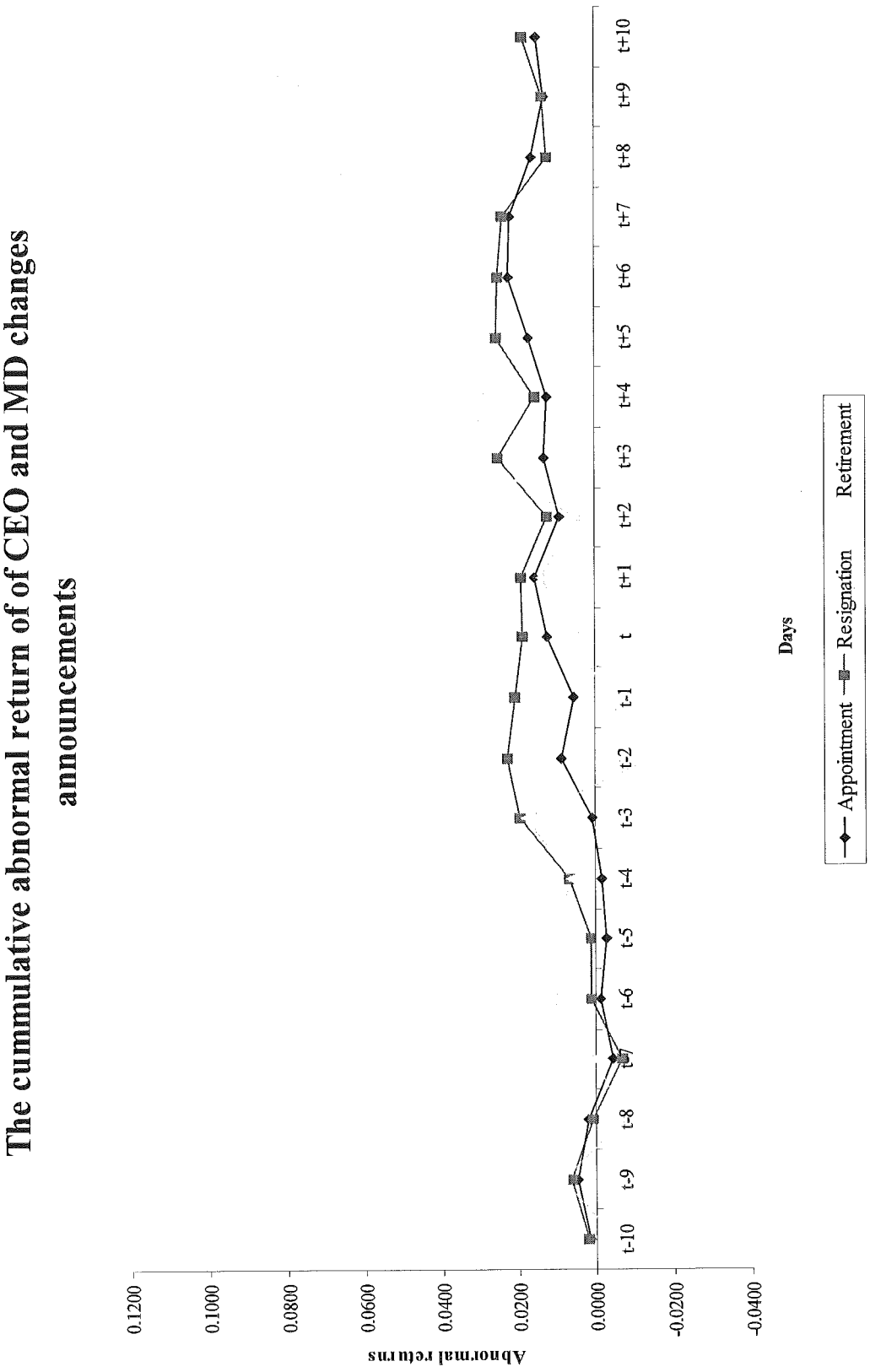

Figure 4.1 The daily abnormal returns of three types of CEO and MD announcements: appointment, resignation and retirement.

4.4 All Chairpersons announcements

4.4.1 All chairperson change announcements

A sample of 23 Chairperson change announcements was examined. The results of the daily abnormal returns of the chairperson change announcements are shown in Table 4.8. On the day of the announcement, there is an insignificant abnormal return of –0.17 per cent, with a standard deviation of 0.0322. Similarly, this negative insignificant abnormal return is also present on the day following the announcement day. During these two days, the proportion of firms reporting positive or negative abnormal return is relatively constant. On average around 48 per cent of the firms report positive return, while 52 per cent of the firms in the sample experiencing negative abnormal returns. Even though the announcement period daily abnormal returns are insignificant, some significant price movements are observed for days t-7, t+4, t+5 and t+7.

When two-day portfolios are considered, as shown in panel B of Table 4.8, no sign of significant effect is found for the test period. The abnormal return for the announcement period is negative and insignificant at –1.34 per cent. But the two-day periods preceding and following this announcement period show positive returns. It should also be noted that during the announcement period, more than 50 per cent of the firms experienced negative abnormal returns.

This finding during the announcement period does not support the positive abnormal return of 0.81 per cent found by Dahya (1993) after examining the UK chairperson changes announcement. This suggests that in New Zealand case, change of chairpersons are expected to have no significant impact on the future firm performance.

4.4.2 All appointments of chairperson announcements

This study examines the effect of a sample of 14 chairman appointment announcements on share returns. Table 4.9 shows the results found from this analysis. In Panel A, the daily abnormal returns are reported, while in Panel B, the abnormal returns are cumulated into sets of two-day portfolios.

It is observed that in the days leading to the announcement the firms experience mostly positive, sometimes significant, abnormal returns. On the day of the announcement the abnormal return is also positive, however, insignificant, whereas on the day following the announcement day, the firms experience a significant negative abnormal return of –2.68 per cent with a *t*-statistic of –1.3724. A large 71 per cent of the firms report a negative abnormal return on this day. Apart from that, a significant positive abnormal return of 1.70 per cent is found on day t+2. Furthermore, in the post-announcement period the abnormal returns are mostly positive and sometimes significant.

Although the daily returns show a positive and insignificant abnormal return on the day the announcement is made, when two-day portfolios are considered, the abnormal return of –2.34 per cent is found during the announcement period. However, for the periods preceding and following this announcement period, the abnormal returns are positive. Apart from that, highly significant abnormal returns are found for the two-day periods of t-4 to t-3, t+4 to t+5 and t+8 to t+9.

This result is consistent with the study carried out by Reingnum (1985), who found an insignificant negative abnormal return of –0.06 per cent on the announcement day of appointment of chairperson and president.

4.4.3 Inside chairperson appointment announcements

Panel A of Table 4.10 shows the result of share returns of 7 chairperson inside appointment announcements of New Zealand listed companies. It is found that the abnormal return of –0.20 per cent on day t is insignificant. A further large negative abnormal return of –4.28 per cent is found for day t+1. On this day the proportion of the firms experiencing a negative abnormal return is 70 per cent, whereas only 21 per cent report positive abnormal returns. The two-day abnormal returns reported in Panel B show that the largest negative abnormal return of –4.48 per cent is reported during the announcement period. During this two-day period, 71 per cent of the companies reported negative returns. These results show that the market is unhappy when an insider is appointed as the chairperson.

The insignificant abnormal return found in this study during the announcement period is consistent with Reingnum (1985), who found the inside appointment of chairpersons to generate an insignificant negative return of –0.29 per cent on the same day.

4.4.4 Outside chairperson appointment announcements

This study found that announcements of outside appointment do not occur commonly in New Zealand Share Market. The sample of seven announcements was used to perform the analysis of the share returns. The results found are presented as follows. Panel A in Table 4.11 shows the daily abnormal returns for the firms, while Panel B present the abnormal returns for two-day portfolios. The significant positive abnormal return of 0.84 per cent with a *t*-statistic of 1.7890 is found on the day before the announcement date. On the other hand, on the announcement day the abnormal return found is positive at 0.88 per cent, but insignificant. In contrast, the significant negative abnormal return of –1.08 per cent is found on the day following the announcement.

Similar results are found for two-day intervals. The announcement period abnormal return is negative and insignificant (0.20 per cent), but positive returns are reported for the two-day periods before and after this announcement. The insignificance of these returns may be attributable to the sample size.

This finding contrasts with Reingnum (1985), who finds that the outside appointments of chairperson and president report a significant positive abnormal return of 1.46 per cent on the announcement day.

4.4.5 Resignation of chairperson announcements

Five announcements of chairperson resignations, gathered from New Zealand listed companies, were examined. In Panel A of Table 4.12, an insignificant abnormal return of –1.26 per cent is found for the announcement day, with 80 per cent of firms reporting negative abnormal returns. Although the abnormal return on the day t-1 and t+1 are also insignificant, they are positive at 0.40 per cent and 0.03 per cent respectively. When the standard deviation between these three days is compared, the standard deviation on the day of the announcement is the highest, with a value of 0.0380. Apart from that, it should also be noted that day t-2 shows a significant negative abnormal return of –1.01 per cent, with a *t*-statistic of –1.6751, and 80 per cent of the firms showing negative abnormal returns.

Similar results are found when two-day portfolios are considered. During the announcement period the abnormal return of -1.23 per cent is found, which is insignificant. A majority of 80 per cent of the firms report negative abnormal returns. Further insignificant negative abnormal returns are found for the two-day periods immediately preceding and following the announcement period. This finding could suggest that the investors are indifferent to the firm value regarding the resignation of the chairperson.

4.4.6 Retirement of chairperson announcements

Prior researchers believed that investors should anticipate retirement of top management announcements. Therefore, share returns during the announcement period should show no significant abnormal returns. After examining a sample of four announcements, this study finds support for this statement. In Panel A of Table 4.13, the majority of the pre-announcement returns are negative and insignificant. Similarly, on the day of the announcement, the abnormal return is insignificantly negative at –0.57 per cent, with equal proportions of firms reporting positive and negative abnormal returns. In addition, the abnormal return found on the following day (day t+1) is also insignificant, although it is positive at 2.60 per cent, with 100 per cent of the firms in the sample reporting positive abnormal returns.

Similar results are also observed for the two-day intervals. During day t to t+1, the abnormal return of 2.03 per cent is insignificant, with the highest standard deviation of 0.0651. Insignificant results are also found during the periods immediately before and following the announcement period. The abnormal returns in these two periods are –0.55 per cent and –2.03 per cent respectively.

From the analysis of these retirement of chairperson announcements it is found that the results of this study support the statement that investors anticipate the announcements. Therefore, no significant effect is present during the announcement period.

Table 4.8 Mean abnormal returns associated with chairperson changes: All announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0019	-0.3157	0.0290	-0.0539	0.0770	52.2	47.8
t-9	-0.0004	-0.0586	0.0336	-0.1052	0.0790	56.5	43.5
t-8	-0.0053	-0.9287	0.0273	-0.0732	0.0372	52.2	47.8
t-7	0.0055	1.4663*	0.0180	-0.0249	0.0564	73.9	26.1
t-6	0.0001	0.0215	0.0217	-0.0440	0.0382	52.2	47.8
t-5	-0.0048	-1.0395	0.0219	-0.0720	0.0251	56.5	43.5
t-4	0.0013	0.2508	0.0241	-0.0359	0.0577	47.8	52.2
t-3	0.0043	0.7636	0.0268	-0.1043	0.0428	73.9	26.1
t-2	0.0009	0.2609	0.0173	-0.0296	0.0499	52.2	47.8
t-1	0.0021	0.6895	0.0148	-0.0302	0.0427	47.8	52.2
t	-0.0017	-0.2506	0.0322	-0.0754	0.0958	47.8	52.2
t+1	-0.0117	-0.8975	0.0626	-0.2756	0.0787	43.5	56.5
t+2	0.0070	0.8577	0.0390	-0.0648	0.1527	52.2	47.8
t+3	0.0060	0.6427	0.0449	-0.1209	0.1361	47.8	52.2
t+4	-0.0064	-1.5293*	0.0202	-0.0749	0.0170	34.8	65.2
t+5	0.0062	1.4283*	0.0208	-0.0493	0.0517	65.2	34.8
t+6	-0.0020	-0.3580	0.0263	-0.0509	0.0745	47.8	52.2
t+7	0.0078	1.7832**	0.0210	-0.0260	0.0715	60.9	39.1
t+8	-0.0016	-0.4147	0.0183	-0.0667	0.0261	56.5	43.5
t+9	-0.0057	-0.7507	0.0367	-0.1294	0.0746	43.5	56.5
t+10	0.0019	0.5293	0.0176	-0.0235	0.0474	56.5	43.5

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0023	-0.2243	0.0495	-0.1590	0.0939	47.8	52.2
t-8 to t-7	0.0002	0.0416	0.0236	-0.0682	0.0389	56.5	43.5
t-6 to t-5	-0.0047	-0.7870	0.0284	-0.0914	0.0377	43.5	56.5
t-4 to t-3	0.0055	0.7190	0.0369	-0.1271	0.0634	60.9	39.1
t-2 to t-1	0.0031	0.6557	0.0225	-0.0266	0.0781	47.8	52.2
t to t+1	-0.0134	-0.9940	0.0647	-0.2684	0.1064	34.8	65.2
t+2 to t+3	0.0130	0.8164	0.0763	-0.1364	0.2888	43.5	56.5
t+4 to t+5	-0.0003	-0.0489	0.0246	-0.0701	0.0395	56.5	43.5
t+6 to t+7	0.0059	0.8922	0.0315	-0.0551	0.1069	52.2	47.8
t+8 to t+9	-0.0073	-0.8809	0.0399	-0.1207	0.0972	43.5	56.5

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of all 23 Chairman announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.9 Mean abnormal returns associated with chairperson changes: All appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0005	0.0564	0.0340	-0.0516	0.0770	57.1	42.9
t-9	0.0098	1.4287*	0.0258	-0.0238	0.0790	57.1	42.9
t-8	-0.0111	-1.3007	0.0320	-0.0732	0.0372	50.0	50.0
t-7	0.0093	1.8229**	0.0192	-0.0212	0.0564	78.6	21.4
t-6	0.0029	0.6007	0.0179	-0.0268	0.0370	64.3	35.7
t-5	0.0004	0.0973	0.0141	-0.0381	0.0191	64.3	35.7
t-4	0.0008	0.1260	0.0241	-0.0359	0.0577	64.3	35.7
t-3	0.0119	2.9711***	0.0150	-0.0073	0.0428	85.7	14.3
t-2	0.0062	1.2314	0.0188	-0.0143	0.0499	64.3	35.7
t-1	0.0026	0.6614	0.0146	-0.0302	0.0282	57.1	42.9
t	0.0034	0.4044	0.0312	-0.0363	0.0958	57.1	42.9
t+1	-0.0268	-1.3724*	0.0730	-0.2756	0.0062	28.6	71.4
t+2	0.0170	1.4675*	0.0435	-0.0140	0.1527	64.3	35.7
t+3	0.0115	1.1088	0.0387	-0.0141	0.1361	42.9	57.1
t+4	0.0003	0.0999	0.0100	-0.0224	0.0170	50.0	50.0
t+5	0.0114	2.3614**	0.0181	-0.0215	0.0517	78.6	21.4
t+6	0.0009	0.1249	0.0270	-0.0394	0.0745	35.7	64.3
t+7	0.0060	1.4529*	0.0155	-0.0171	0.0397	64.3	35.7
t+8	0.0004	0.1474	0.0104	-0.0192	0.0261	50.0	50.0
t+9	-0.0145	-1.3677*	0.0396	-0.1294	0.0163	42.9	57.1
t+10	0.0011	0.2690	0.0160	-0.0170	0.0474	57.1	42.9

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0104	0.9278	0.0418	-0.0386	0.0939	42.9	57.1
t-8 to t-7	-0.0018	-0.2295	0.0291	-0.0682	0.0389	50.0	50.0
t-6 to t-5	0.0032	0.5168	0.0235	-0.0481	0.0377	57.1	42.9
t-4 to t-3	0.0127	2.2713**	0.0209	-0.0284	0.0615	78.6	21.4
t-2 to t-1	0.0088	1.2571	0.0261	-0.0263	0.0781	64.3	35.7
t to t+1	-0.0234	-1.1907	0.0736	-0.2684	0.0475	28.6	71.4
t+2 to t+3	0.0285	1.3110	0.0813	-0.0213	0.2888	57.1	42.9
t+4 to t+5	0.0117	2.9027***	0.0150	-0.0113	0.0395	85.7	14.3
t+6 to t+7	0.0069	0.8338	0.0311	-0.0183	0.1069	50.0	50.0
t+8 to t+9	-0.0141	-1.3830*	0.0381	-0.1207	0.0290	35.7	64.3

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 14 all appointment of announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day follow the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.10 Mean abnormal returns associated with chairman changes: Inside appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0182	1.3286	0.0363	-0.0135	0.0770	85.7	14.3
t-9	0.0152	1.3774	0.0293	-0.0083	0.0790	71.4	28.6
t-8	-0.0054	-0.4603	0.0310	-0.0721	0.0162	71.4	28.6
t-7	0.0080	1.6025*	0.0133	-0.0123	0.0311	85.7	14.3
t-6	0.0001	0.0124	0.0204	-0.0268	0.0335	71.4	28.6
t-5	0.0092	3.3655***	0.0072	0.0019	0.0191	100.0	0.0
t-4	0.0003	0.0244	0.0316	-0.0359	0.0577	57.1	42.9
t-3	0.0096	1.9981**	0.0127	-0.0073	0.0276	85.7	14.3
t-2	0.0021	0.3834	0.0147	-0.0143	0.0305	57.1	42.9
t-1	-0.0033	-0.5789	0.0150	-0.0302	0.0163	57.1	42.9
t	-0.0020	-0.3080	0.0175	-0.0227	0.0267	42.9	57.1
t+1	-0.0428	-1.0987	0.1030	-0.2756	0.0062	28.6	71.4
t+2	0.0283	1.2716	0.0588	-0.0073	0.1527	57.1	42.9
t+3	0.0191	0.9465	0.0534	-0.0141	0.1361	28.6	71.4
t+4	-0.0029	-0.6764	0.0113	-0.0224	0.0159	28.6	71.4
t+5	0.0088	1.0326	0.0226	-0.0215	0.0517	71.4	28.6
t+6	0.0022	0.3275	0.0181	-0.0212	0.0262	57.1	42.9
t+7	-0.0004	-0.1157	0.0100	-0.0171	0.0087	71.4	28.6
t+8	0.0023	0.5090	0.0118	-0.0081	0.0261	42.9	57.1
t+9	-0.0172	-0.9079	0.0502	-0.1294	0.0163	57.1	42.9
t+10	-0.0032	-0.8374	0.0102	-0.0170	0.0089	57.1	42.9

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0335	1.8912*	0.0468	-0.0144	0.0939	57.1	42.9
t-8 to t-7	0.0026	0.2000	0.0348	-0.0682	0.0338	57.1	42.9
t-6 to t-5	0.0093	1.2127	0.0203	-0.0216	0.0370	71.4	28.6
t-4 to t-3	0.0099	0.9142	0.0286	-0.0284	0.0615	57.1	42.9
t-2 to t-1	-0.0011	-0.1417	0.0214	-0.0263	0.0334	57.1	42.9
t to t+1	-0.0448	-1.1866	0.0999	-0.2684	0.0248	28.6	71.4
t+2 to t+3	0.0474	1.1201	0.1119	-0.0202	0.2888	57.1	42.9
t+4 to t+5	0.0059	1.1740	0.0134	-0.0113	0.0293	71.4	28.6
t+6 to t+7	0.0018	0.2989	0.0159	-0.0183	0.0300	57.1	42.9
t+8 to t+9	-0.0150	-0.8076	0.0490	-0.1207	0.0290	42.9	57.1

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of seven inside appointment of chairman announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day follow the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.11 Mean abnormal returns associated with chairman changes: Outside appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0172	-2.1480**	0.0212	-0.0516	0.0049	28.6	71.4
t-9	0.0045	0.5191	0.0227	-0.0238	0.0380	42.9	57.1
t-8	-0.0168	-1.2987	0.0343	-0.0732	0.0372	28.6	71.4
t-7	0.0106	1.1342	0.0248	-0.0212	0.0564	71.4	28.6
t-6	0.0057	0.9248	0.0162	-0.0100	0.0370	57.1	42.9
t-5	-0.0085	-1.6021*	0.0140	-0.0381	0.0043	28.6	71.4
t-4	0.0013	0.2198	0.0160	-0.0299	0.0233	71.4	28.6
t-3	0.0142	2.1257**	0.0177	-0.0069	0.0428	85.7	14.3
t-2	0.0102	1.1991	0.0226	-0.0115	0.0499	71.4	28.6
t-1	0.0084	1.7890*	0.0125	-0.0043	0.0282	57.1	42.9
t	0.0088	0.5583	0.0416	-0.0363	0.0958	71.4	28.6
t+1	-0.0108	-1.5282*	0.0187	-0.0483	0.0055	28.6	71.4
t+2	0.0058	0.8308	0.0186	-0.0140	0.0414	71.4	28.6
t+3	0.0038	0.6381	0.0158	-0.0094	0.0364	57.1	42.9
t+4	0.0034	1.1158	0.0081	-0.0078	0.0170	71.4	28.6
t+5	0.0140	2.7508**	0.0135	-0.0042	0.0377	85.7	14.3
t+6	-0.0004	-0.0323	0.0354	-0.0394	0.0745	14.3	85.7
t+7	0.0125	1.8337*	0.0180	-0.0070	0.0397	57.1	42.9
t+8	-0.0014	-0.4145	0.0092	-0.0192	0.0096	57.1	42.9
t+9	-0.0117	-1.0580	0.0293	-0.0753	0.0154	28.6	71.4
t+10	0.0055	0.7299	0.0201	-0.0126	0.0474	57.1	42.9

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0128	-1.8299*	0.0185	-0.0386	0.0155	28.6	71.4
t-8 to t-7	-0.0062	-0.6805	0.0241	-0.0312	0.0389	42.9	57.1
t-6 to t-5	-0.0028	-0.2827	0.0264	-0.0481	0.0377	42.9	57.1
t-4 to t-3	0.0155	3.8521***	0.0107	0.0049	0.0301	100.0	0.0
t-2 to t-1	0.0187	1.7612	0.0281	-0.0010	0.0781	71.4	28.6
t to t+1	-0.0020	-0.2051	0.0260	-0.0308	0.0475	42.9	57.1
t+2 to t+3	0.0097	0.8090	0.0316	-0.0213	0.0778	57.1	42.9
t+4 to t+5	0.0174	3.0065**	0.0153	0.0048	0.0395	100.0	0.0
t+6 to t+7	0.0120	0.7563	0.0421	-0.0095	0.1069	42.9	57.1
t+8 to t+9	-0.0132	-1.2870	0.0271	-0.0722	0.0061	28.6	71.4

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of seven outside appointment of chairperson announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day follow the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.12 Mean abnormal returns associated with chairman changes: Resignation announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0150	-1.4570	0.0231	-0.0539	0.0034	20.0	80.0
t-9	-0.0276	-1.2940	0.0477	-0.1052	0.0062	60.0	40.0
t-8	0.0110	1.4654	0.0168	-0.0108	0.0290	60.0	40.0
t-7	-0.0064	-0.8855	0.0161	-0.0249	0.0085	40.0	60.0
t-6	0.0075	0.6140	0.0274	-0.0210	0.0382	40.0	60.0
t-5	-0.0197	-1.4609	0.0302	-0.0720	0.0030	20.0	80.0
t-4	0.0028	0.2028	0.0304	-0.0153	0.0561	20.0	80.0
t-3	0.0037	1.2743	0.0065	-0.0029	0.0125	60.0	40.0
t-2	-0.0101	-1.6751*	0.0134	-0.0296	0.0035	20.0	80.0
t-1	0.0040	0.4073	0.0222	-0.0097	0.0427	40.0	60.0
t	-0.0126	-0.7437	0.0380	-0.0754	0.0279	20.0	80.0
t+1	0.0003	0.0229	0.0294	-0.0391	0.0425	40.0	60.0
t+2	0.0031	0.4236	0.0162	-0.0155	0.0228	60.0	40.0
t+3	-0.0069	-0.2004	0.0768	-0.1209	0.0956	20.0	80.0
t+4	-0.0241	-1.5099	0.0357	-0.0749	0.0075	20.0	80.0
t+5	0.0075	0.8490	0.0198	-0.0086	0.0416	60.0	40.0
t+6	-0.0096	-0.6168	0.0349	-0.0509	0.0368	60.0	40.0
t+7	0.0091	1.1358	0.0179	-0.0043	0.0372	40.0	60.0
t+8	-0.0075	-0.4907	0.0343	-0.0667	0.0225	60.0	40.0
t+9	0.0085	0.4911	0.0385	-0.0244	0.0746	40.0	60.0
t+10	0.0085	0.8717	0.0218	-0.0235	0.0327	80.0	20.0

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0427	-1.3911	0.0686	-0.1590	0.0050	40.0	60.0
t-8 to t-7	0.0046	1.6070*	0.0065	-0.0038	0.0125	80.0	20.0
t-6 to t-5	-0.0122	-1.3406	0.0204	-0.0338	0.0174	20.0	80.0
t-4 to t-3	0.0064	0.4431	0.0324	-0.0182	0.0634	20.0	80.0
t-2 to t-1	-0.0060	-0.9357	0.0144	-0.0266	0.0132	20.0	80.0
t to t+1	-0.0123	-1.0147	0.0272	-0.0454	0.0234	20.0	80.0
t+2 to t+3	-0.0038	-0.0970	0.0878	-0.1364	0.1082	40.0	60.0
t+4 to t+5	-0.0166	-1.1909	0.0311	-0.0701	0.0111	20.0	80.0
t+6 to t+7	-0.0005	-0.0294	0.0385	-0.0551	0.0537	40.0	60.0
t+8 to t+9	0.0009	0.0352	0.0593	-0.0638	0.0972	40.0	60.0

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of five resignation chairperson announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day follow the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.13 Mean abnormal returns associated with chairman changes: Retirement announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0060	1.9737*	0.0061	0.0004	0.0127	100.0	0.0
t-9	-0.0023	-0.1859	0.0247	-0.0315	0.0242	50.0	50.0
t-8	-0.0053	-1.3532	0.0078	-0.0146	0.0016	50.0	50.0
t-7	0.0069	1.2390	0.0112	0.0001	0.0236	100.0	0.0
t-6	-0.0189	-1.7576*	0.0215	-0.0440	0.0060	25.0	75.0
t-5	-0.0039	-0.2557	0.0308	-0.0474	0.0251	75.0	25.0
t-4	0.0010	0.0853	0.0225	-0.0229	0.0314	25.0	75.0
t-3	-0.0217	-0.7841	0.0554	-0.1043	0.0132	50.0	50.0
t-2	-0.0037	-0.9251	0.0080	-0.0153	0.0018	50.0	50.0
t-1	-0.0018	-1.6791*	0.0022	-0.0032	0.0014	25.0	75.0
t	-0.0057	-0.3377	0.0337	-0.0524	0.0277	50.0	50.0
t+1	0.0260	1.4425	0.0360	0.0007	0.0787	100.0	0.0
t+2	-0.0234	-1.5964	0.0294	-0.0648	-0.0022	0.0	100.0
t+3	0.0031	1.4289	0.0043	0.0007	0.0096	100.0	0.0
t+4	-0.0079	-1.3657	0.0115	-0.0249	-0.0005	0.0	100.0
t+5	-0.0137	-1.1534	0.0238	-0.0493	0.0007	25.0	75.0
t+6	-0.0024	-0.3896	0.0124	-0.0201	0.0091	75.0	25.0
t+7	0.0125	0.6019	0.0415	-0.0260	0.0715	75.0	25.0
t+8	-0.0011	-0.1205	0.0188	-0.0269	0.0181	75.0	25.0
t+9	0.0070	0.9947	0.0142	-0.0033	0.0273	50.0	50.0
t+10	-0.0035	-0.3413	0.0204	-0.0168	0.0262	25.0	75.0

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0037	0.2913	0.0256	-0.0310	0.0255	75.0	25.0
t-8 to t-7	0.0016	0.1950	0.0167	-0.0114	0.0252	50.0	50.0
t-6 to t-5	-0.0229	-0.9919	0.0461	-0.0914	0.0083	25.0	75.0
t-4 to t-3	-0.0208	-0.5596	0.0742	-0.1271	0.0447	50.0	50.0
t-2 to t-1	-0.0055	-1.2014	0.0092	-0.0181	0.0033	25.0	75.0
t to t+1	0.0203	0.6238	0.0651	-0.0517	0.1064	75.0	25.0
t+2 to t+3	-0.0203	-1.6018	0.0254	-0.0551	-0.0011	0.0	100.0
t+4 to t+5	-0.0216	-2.0323*	0.0213	-0.0504	-0.0020	0.0	100.0
t+6 to t+7	0.0101	0.6337	0.0318	-0.0252	0.0513	75.0	25.0
t+8 to t+9	0.0059	0.9445	0.0125	-0.0027	0.0245	75.0	25.0

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of four retirement of chairperson announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day follow the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

4.4.7 Comparison between different type of chairperson announcements

After analysing the abnormal returns of each type of announcements, this section compares and contrasts the results found in prior sections in Figure 4.2.

Figure 4.2 shows that, overall, the abnormal returns of appointment of chairperson announcements have a higher increase compared to resignation and retirement announcements. Over a 21-day test period, appointments of chairpersons seem to increase the value of the shares, unlike resignations and retirements. However, around day t+2, the cumulative abnormal returns of chairperson appointment drop slightly. Thereafter, they continue to rise until the end of the 21-day period. The abnormal returns from resignation announcements, on the other hand, tend to fluctuate throughout the test period with the abnormal return at the end of the period being slightly lower than at the beginning.

In contrast to the effect of appointment of chairperson announcements, the news of chairpersons retirement seems to decrease the firm's value, as demonstrated in Figure 4.2. This shows a fall in share returns during the pre-announcement period, on the announcement day and during the period of post-announcement. This comparison seems to suggest that investors view the news of the appointment of a chairperson as a more positive event than the news of resignation and retirement.

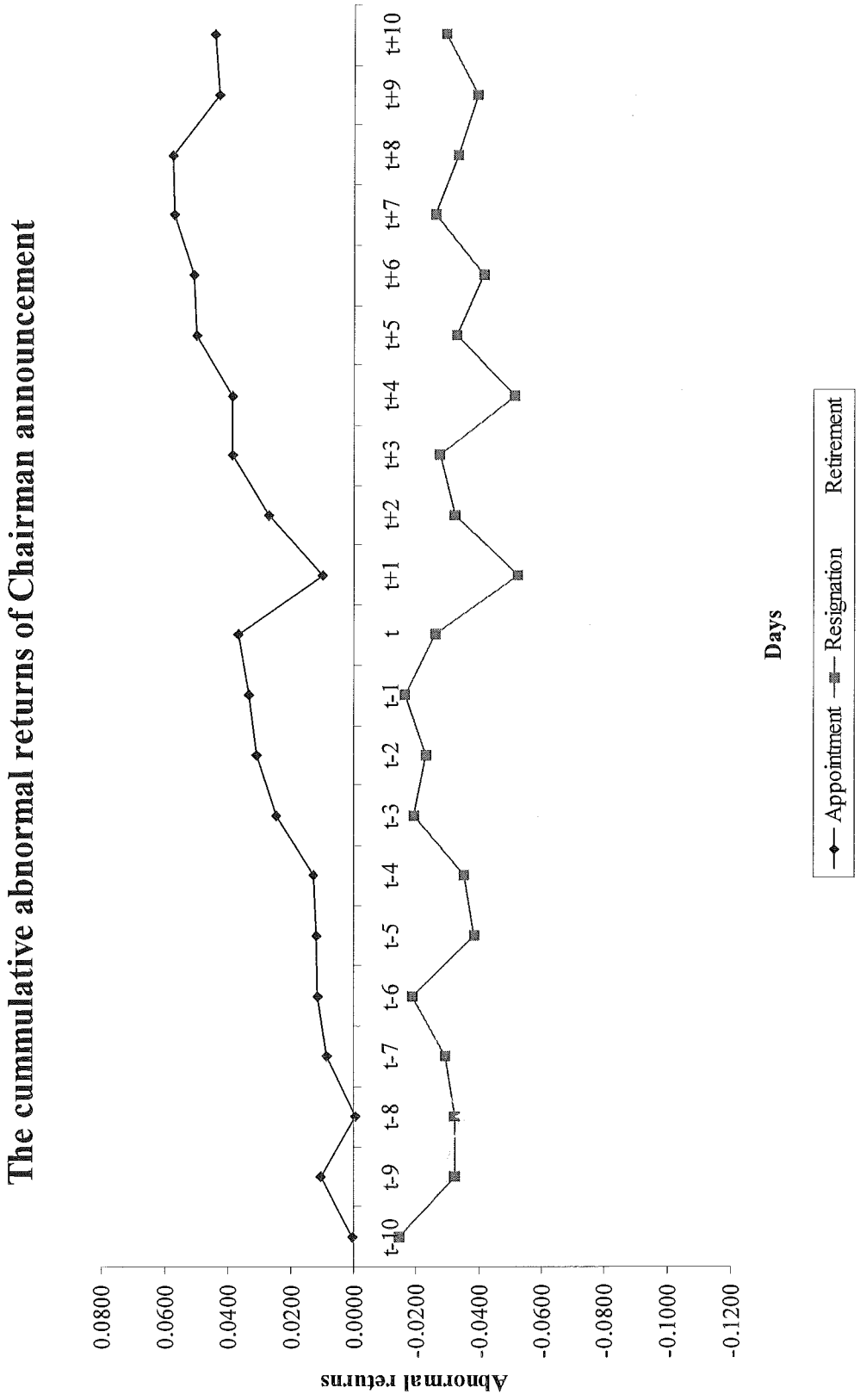

Figure 4.2 The daily abnormal returns of three types of chairperson announcement: appointment, resignation and retirement.

4.5 Director announcements

Many researchers have pointed out the importance of directors in the firms' decision making process (Rosenstein and Wyatt, 1993; and Kaplan, 1994). This section examines the effect on share returns of changes in directors of the New Zealand listed companies.

4.5.1 All director announcements

The sample consists of 342 announcements of changes in directors from 1993-1999. Table 4.14 shows the results of this event study analysis. Overall, the daily abnormal returns seem to be insignificant during the 21-day test period, except toward the end of the test period (day t+8 and day t+9). On the announcement day, an insignificant abnormal return of 0.41 per cent is found. Similar to the announcement day, the abnormal return of 0.13 per cent on the day following the announcement is insignificant. The proportion of firms reporting positive and negative abnormal returns on each of these days is relatively constant, and averages around 50 per cent for each group. During the post-announcement period, the abnormal returns are mostly negative and occasionally significant. This shows that following the announcement of a director change, overall, investor expectation tends toward negative.

After considering the daily return, the two-day portfolios are analysed and the results are presented in Panel B of Table 4.14. During the announcement period, the abnormal return is found to be insignificantly positive at 0.54 per cent, although 51 per cent of the firms reported negative abnormal returns. It is also observed that during the periods of day t-2 to t-1 and day t+2 to t+3, the abnormal returns are also insignificant, however, negative.

The finding of insignificant positive abnormal returns during the announcement period seems to suggest that investors are indifferent to the firm's future performance. This result is inconsistent with Rosenstein and Wyatt (1993) who find a significant positive abnormal return of 0.13 per cent following the change of director.

4.5.2 All director appointment announcement

The sample of 188 all director appointment announcements was analysed. Table 4.15, Panels A and B, shows the results. Panel A presents the daily abnormal returns for the 21-day test period. On the day the announcements are officially released, a significant positive abnormal return of 1.06 per cent, with a *t*-statistic of 1.4172 is found. Further significant positive abnormal returns of 0.73 per cent and 0.50 per cent are present on days t+1 and t+2. Analysis of two-day return intervals also discloses similar results. The announcement period abnormal return of 1.79 per cent is significant at 10 per cent level. Insignificant abnormal returns are observed for similar time intervals following the announcement period. These results clearly indicate that appointment of directors to New Zealand boards create positive impacts on share prices.

The finding of significant positive abnormal returns during the announcement period is consistent with Rosenstein and Wyatt (1993), who find a significant positive abnormal return of 0.13 per cent on the announcement day.

4.5.3 Inside director appointment announcements

Table 4.16 shows the results of the 19 inside director announcements analysed. Panel A presents daily abnormal returns for the 21-day test period. On the announcement day, an insignificant abnormal return of –0.50 per cent, with a standard deviation of 0.0509, is reported. In contrast, after the announcement was officially released to the market, a significant positive abnormal return of 1.55 per cent was observed, with a *t*-statistic of 1.7059. A large proportion of 63.2 per cent of the firms in the sample reported positive abnormal returns on this day. Apart from that, it should be noted that during the pre-announcement period, the daily abnormal returns show signs of significant effect on days such as t-7 and t-5. During the post-announcement period, no significant effect is observed.

In Panel B, when the two-day return intervals are considered, an insignificant abnormal return of 1.05 per cent, with 63 per cent of the firms experiencing positive abnormal returns, is found for the announcement period. Further positive abnormal returns are reported for the two periods following the announcement period. In addition, it should also be noted that highly significant positive abnormal returns of 2.07 per cent and 0.82 per cent are found for the two-day periods of t-6 to t-5 and t-4 to t-3.

4.5.4 Outside director appointment announcements

This section presents the results of the analysis of the effect of 169 announcements of outside director appointments on share returns using the event study. According to Table 4.17 the announcement day positive abnormal return of 1.23 per cent is significant at 10 per cent level. After the announcement is made, on day t+1 the abnormal return also shows a positive value of 0.64 per cent. Apart from that, it should be noted that on day t+2, a highly significant abnormal return of 0.49 per cent (with *t*-statistic of 1.6898) has been reported. These results indicate that the market is pleased when outsiders are appointed to New Zealand boards.

Furthermore, Panel B shows the cumulative two-day portfolios of abnormal returns of outside director appointment announcements. Overall, there is no sign of significant abnormal returns present before the announcement period, during the announcement period or in the post-announcement period. Although the daily abnormal return on the announcement day shows a significant positive value, the insignificant abnormal return of 1.87 per cent is observed when the two-day announcement period is considered. During day t-2 and t-1, an insignificant positive abnormal return of 0.22 per cent is reported. However, an insignificant negative abnormal return of –0.70 per cent is found for the two-day period covering day t+2 to t+3.

The result observed in this study from daily abnormal returns is consistent with Rosenstein and Wyatt (1993), who find abnormal returns associated with outside appointments to be significantly positive at 0.13 per cent. This study, on the other

hand, suggests that the appointment of outside directors in general has a positive effect on shareholders' wealth.

4.5.5 Resignation of Director announcements

After the sample of 111 announcement was examined, the results found are presented in Table 4.18. Panel A shows that the daily abnormal return of 0.51 per cent on the day of announcement is positive and significant, with a *t*-statistic of 1.3210. The standard deviation of 0.0407 is also relatively high, whereas on the days before and after the announcement, the table shows insignificant abnormal returns of 0.05 per cent and 0.26 per cent respectively. Apart from that, during the pre-announcement period, significant negative abnormal returns are reported on days t-4 and t-3. The corresponding abnormal returns for these two days are –0.32 per cent and -0.51 per cent respectively. During the post-announcement period, significant negative abnormal returns are also observed on day t+3, with the value of –0.44 per cent, and on day t+8, with the value of –0.40 per cent.

Panel B in Table 4.18 also shows that the two-day cumulative abnormal return during the announcement period is positive at 0.77 per cent, and significant. However, only 49.5 per cent of the firms in the sample report positive abnormal returns during this period. In contrast, the abnormal returns during the period before and immediately following the announcement are insignificant. During day t-2 to t-1, the abnormal return found is 0.30 per cent, while the abnormal return of -0.13 per cent is reported during day t+2 and t+3. Apart from that, a highly significant abnormal return of –0.83 per cent with a *t*-statistic of –2.2986 should also be noted during day t-4 to t-3. The results drawn from this study seem to suggest that the resignation of directors induces positive expectation in the minds of outside investors with regard to the future performance of the firm.

4.5.6 Retirement of director announcements

After examining 43 director retirement announcements, the results reported in Table 4.19 show that there is no sign of significant effect on the share return present during the 21-day period examined. Overall, the daily abnormal returns are negative throughout the 21-day test period. On the announcement day, an insignificant negative abnormal return of –2.68 is found. On this day, the proportion of firms experiencing a negative abnormal return is 62.8 per cent. Similar results are found on the days before and following the announcement day, with abnormal returns of –2.58 per cent and –2.88 per cent respectively.

In addition, the two-day announcement period, in panel B, also shows an insignificant abnormal return of –5.56 per cent, with 69.8 per cent of the firms in the sample showing negative abnormal returns. Abnormal returns of similar magnitudes are also observed during the periods before and after the announcement. The abnormal return reported before the announcement period is –5.38 per cent and following the announcement period is –5.83 per cent. This finding seems to support the suggestion, made by prior researchers, that there should be no significant effect on share returns following the retirement announcement. The reason for this is that investors should anticipate this event. However, the observation of negative daily abnormal returns throughout the test period is somewhat puzzling.

Table 4.14 Mean abnormal returns associated with director changes: All announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0031	-0.8471	0.0678	-1.1308	0.1866	47.4	52.6
t-9	-0.0030	-0.6172	0.0897	-1.1531	0.2538	50.6	49.4
t-8	-0.0069	-1.2586	0.1013	-1.3792	0.2250	45.0	55.0
t-7	0.0032	0.4811	0.1213	-1.1529	1.6758	53.2	46.8
t-6	-0.0162	-0.8762	0.3426	-6.1808	0.3083	49.4	50.6
t-5	0.0063	0.6976	0.1659	-1.1129	2.7675	52.3	47.7
t-4	0.0016	0.2866	0.1037	-1.0668	1.4851	49.4	50.6
t-3	0.0001	0.0114	0.1254	-1.0886	1.9282	48.0	52.0
t-2	0.0032	0.5535	0.1057	-1.0571	1.5351	50.9	49.1
t-1	-0.0082	-1.1865	0.1273	-2.0273	0.2452	50.3	49.7
t	0.0041	0.7493	0.1008	-1.1408	1.2703	46.8	53.2
t+1	0.0013	0.2847	0.0828	-1.1453	0.7904	52.3	47.7
t+2	-0.0004	-0.0929	0.0728	-1.1501	0.2494	48.5	51.5
t+3	-0.0107	-1.2580	0.1569	-2.5335	0.5840	46.5	53.5
t+4	-0.0036	-0.9770	0.0680	-1.1180	0.2001	47.1	52.9
t+5	-0.0030	-0.7991	0.0691	-1.1415	0.2698	49.7	50.3
t+6	0.0032	0.3972	0.1505	-1.1293	2.4657	52.0	48.0
t+7	-0.0046	-0.9920	0.0866	-1.1383	0.5426	47.1	52.9
t+8	-0.0081	-1.4029*	0.1067	-1.5425	0.1955	46.8	53.2
t+9	-0.0081	-1.3737*	0.1085	-1.4131	0.5428	42.1	57.9
t+10	-0.0024	-0.5668	0.0798	-1.1262	0.7845	48.0	52.0

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0061	-0.7875	0.1432	-2.2839	0.3143	48.8	51.2
t-8 to t-7	-0.0037	-0.4952	0.1395	-2.2713	0.3769	50.3	49.7
t-6 to t-5	-0.0100	-0.8079	0.2283	-3.4133	0.4038	51.8	48.2
t-4 to t-3	0.0017	0.1385	0.2248	-2.1554	3.4132	47.4	52.6
t-2 to t-1	-0.0050	-0.7336	0.1261	-2.0731	0.4777	51.2	48.8
t to t+1	0.0054	0.5678	0.1746	-2.2861	2.0607	48.8	51.2
t+2 to t+3	-0.0110	-1.0660	0.1915	-2.4293	0.5749	48.2	51.8
t+4 to t+5	-0.0066	-0.9336	0.1303	-2.2596	0.3702	45.3	54.7
t+6 to t+7	-0.0014	-0.1622	0.1614	-2.2676	1.6708	48.2	51.8
t+8 to t+9	-0.0162	-1.4265*	0.2094	-2.9556	0.5431	44.7	55.3

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of all 342 director announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.15 Mean abnormal returns associated with director changes: All appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0020	-0.7852	0.0348	-0.2407	0.1866	46.8	53.2
t-9	-0.0034	-0.5730	0.0803	-1.0096	0.1815	50.5	49.5
t-8	-0.0043	-0.5493	0.1067	-1.3792	0.2250	45.7	54.3
t-7	0.0137	1.4690*	0.1282	-0.1012	1.6758	52.7	47.3
t-6	-0.0261	-0.7904	0.4535	-6.1808	0.3083	48.9	51.1
t-5	0.0186	1.2492	0.2040	-0.1647	2.7675	51.6	48.4
t-4	0.0101	1.2154	0.1134	-0.1347	1.4851	50.0	50.0
t-3	0.0076	0.7039	0.1472	-0.4134	1.9282	46.3	53.7
t-2	0.0107	1.2587	0.1162	-0.0742	1.5351	48.9	51.1
t-1	-0.0092	-0.8367	0.1515	-2.0273	0.2452	48.9	51.1
t	0.0106	1.4172*	0.1022	-0.1773	1.2703	47.3	52.7
t+1	0.0073	1.5071*	0.0667	-0.1962	0.7904	54.3	45.7
t+2	0.0050	1.8788**	0.0368	-0.1837	0.2062	48.9	51.1
t+3	-0.0111	-0.7897	0.1920	-2.5335	0.5840	48.4	51.6
t+4	0.0001	0.0318	0.0340	-0.2122	0.2001	45.7	54.3
t+5	0.0010	0.3818	0.0360	-0.2184	0.2698	49.5	50.5
t+6	0.0137	1.0320	0.1815	-0.1004	2.4657	48.9	51.1
t+7	-0.0009	-0.1627	0.0771	-0.7949	0.5426	47.3	52.7
t+8	-0.0065	-0.7647	0.1158	-1.5425	0.1955	47.9	52.1
t+9	-0.0072	-0.8590	0.1153	-1.4131	0.5428	39.9	60.1
t+10	0.0024	0.4887	0.0665	-0.1798	0.7845	47.9	52.1

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0054	-0.8157	0.0899	-1.0702	0.3143	47.9	52.1
t-8 to t-7	0.0095	2.1659**	0.0599	-0.1303	0.3610	50.0	50.0
t-6 to t-5	-0.0076	-0.4046	0.2560	-3.4133	0.4038	52.7	47.3
t-4 to t-3	0.0176	0.9421	0.2563	-0.4094	3.4132	46.3	53.7
t-2 to t-1	0.0014	0.3065	0.0638	-0.4922	0.4777	51.1	48.9
t to t+1	0.0179	1.5410*	0.1592	-0.2207	2.0607	52.7	47.3
t+2 to t+3	-0.0060	-0.4348	0.1895	-2.4293	0.5749	51.1	48.9
t+4 to t+5	0.0011	0.2945	0.0504	-0.2143	0.3702	44.1	55.9
t+6 to t+7	0.0127	1.2868*	0.1358	-0.1330	1.6708	47.3	52.7
t+8 to t+9	-0.0137	-0.8399	0.2233	-2.9556	0.5431	46.3	53.7

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 188 all appointment of director announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, Prop –ve is proportion of AR negative.

Table 4.16 Mean abnormal returns associated with director changes: Inside appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0176	-1.2954	0.0592	-0.2407	0.0617	36.8	63.2
t-9	0.0063	0.8193	0.0336	-0.0363	0.1203	63.2	36.8
t-8	-0.0036	-0.4682	0.0333	-0.1251	0.0353	42.1	57.9
t-7	0.0062	1.5097*	0.0178	-0.0359	0.0396	73.7	26.3
t-6	0.0096	1.1052	0.0379	-0.0469	0.1134	57.9	42.1
t-5	0.0111	2.0393**	0.0237	-0.0202	0.0893	57.9	42.1
t-4	0.0033	0.9624	0.0150	-0.0249	0.0437	57.9	42.1
t-3	0.0049	1.2136	0.0177	-0.0448	0.0343	63.2	36.8
t-2	-0.0011	-0.2246	0.0204	-0.0457	0.0436	36.8	63.2
t-1	-0.0040	-0.9121	0.0192	-0.0452	0.0295	47.4	52.6
t	-0.0050	-0.4321	0.0509	-0.1773	0.0960	42.1	57.9
t+1	0.0155	1.7059*	0.0397	-0.0736	0.0962	63.2	36.8
t+2	0.0059	1.0892	0.0237	-0.0247	0.0555	47.4	52.6
t+3	-0.0027	-0.3029	0.0390	-0.1226	0.0862	36.8	63.2
t+4	0.0033	0.4414	0.0327	-0.0456	0.1119	47.4	52.6
t+5	-0.0017	-0.3209	0.0236	-0.0305	0.0606	31.6	68.4
t+6	0.0004	0.1026	0.0185	-0.0397	0.0459	42.1	57.9
t+7	-0.0072	-0.9346	0.0335	-0.1243	0.0362	47.4	52.6
t+8	-0.0042	-0.9574	0.0192	-0.0698	0.0252	42.1	57.9
t+9	0.0012	0.1633	0.0307	-0.0900	0.0508	47.4	52.6
t+10	-0.0033	-0.4451	0.0321	-0.1185	0.0377	47.4	52.6

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0113	-1.0542	0.0466	-0.1204	0.1097	36.8	63.2
t-8 to t-7	0.0026	0.2882	0.0389	-0.1303	0.0511	73.7	26.3
t-6 to t-5	0.0207	1.9270**	0.0468	-0.0501	0.1117	73.7	26.3
t-4 to t-3	0.0082	1.7734*	0.0202	-0.0318	0.0496	52.6	47.4
t-2 to t-1	-0.0051	-0.9255	0.0239	-0.0496	0.0287	47.4	52.6
t to t+1	0.0105	1.2978	0.0352	-0.0811	0.0891	63.2	36.8
t+2 to t+3	0.0032	0.2593	0.0538	-0.1302	0.1418	52.6	47.4
t+4 to t+5	0.0016	0.1825	0.0378	-0.0701	0.1056	47.4	52.6
t+6 to t+7	-0.0068	-0.8342	0.0353	-0.1308	0.0439	47.4	52.6
t+8 to t+9	-0.0031	-0.3990	0.0335	-0.0861	0.0725	47.4	52.6

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 19 inside appointment director announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.17 Mean abnormal returns associated with director changes: Outside appointment announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0002	-0.1020	0.0307	-0.1714	0.1866	47.9	52.1
t-9	-0.0044	-0.6880	0.0840	-1.0096	0.1815	49.1	50.9
t-8	-0.0044	-0.5051	0.1121	-1.3792	0.2250	46.2	53.8
t-7	0.0146	1.4036*	0.1351	-0.1012	1.6758	50.3	49.7
t-6	-0.0302	-0.8201	0.4781	-6.1808	0.3083	47.9	52.1
t-5	0.0194	1.1744	0.2151	-0.1647	2.7675	50.9	49.1
t-4	0.0108	1.1759	0.1195	-0.1347	1.4851	49.1	50.9
t-3	0.0079	0.6578	0.1552	-0.4134	1.9282	44.4	55.6
t-2	0.0120	1.2735	0.1224	-0.0742	1.5351	50.3	49.7
t-1	-0.0098	-0.8004	0.1597	-2.0273	0.2452	49.1	50.9
t	0.0123	1.5054*	0.1063	-0.1377	1.2703	47.9	52.1
t+1	0.0064	1.2063	0.0692	-0.1962	0.7904	53.3	46.7
t+2	0.0049	1.6898**	0.0381	-0.1837	0.2062	49.1	50.9
t+3	-0.0120	-0.7715	0.2021	-2.5335	0.5840	49.7	50.3
t+4	-0.0003	-0.1084	0.0342	-0.2122	0.2001	45.6	54.4
t+5	0.0013	0.4581	0.0372	-0.2184	0.2698	51.5	48.5
t+6	0.0151	1.0292	0.1913	-0.1004	2.4657	49.7	50.3
t+7	-0.0002	-0.0339	0.0806	-0.7949	0.5426	47.3	52.7
t+8	-0.0067	-0.7150	0.1220	-1.5425	0.1955	48.5	51.5
t+9	-0.0082	-0.8759	0.1212	-1.4131	0.5428	39.1	60.9
t+10	0.0030	0.5636	0.0693	-0.1798	0.7845	47.9	52.1

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0047	-0.6504	0.0936	-1.0702	0.3143	49.1	50.9
t-8 to t-7	0.0102	2.1516	0.0618	-0.0880	0.3610	47.3	52.7
t-6 to t-5	-0.0107	-0.5177	0.2695	-3.4133	0.4038	50.3	49.7
t-4 to t-3	0.0187	0.8976	0.2703	-0.4094	3.4132	45.6	54.4
t-2 to t-1	0.0022	0.4196	0.0668	-0.4922	0.4777	51.5	48.5
t to t+1	0.0187	1.4531	0.1676	-0.2207	2.0607	51.5	48.5
t+2 to t+3	-0.0070	-0.4599	0.1991	-2.4293	0.5749	50.9	49.1
t+4 to t+5	0.0010	0.2580	0.0517	-0.2143	0.3702	43.8	56.2
t+6 to t+7	0.0149	1.3613	0.1426	-0.1330	1.6708	47.3	52.7
t+8 to t+9	-0.0149	-0.8216	0.2353	-2.9556	0.5431	46.2	53.8

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 169 outside appointment director announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.18 Mean abnormal returns associated with director changes: Resignation announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	0.0010	0.5198	0.0203	-0.0700	0.1239	45.9	54.1
t-9	0.0054	1.5539*	0.0366	-0.0446	0.2538	50.5	49.5
t-8	-0.0028	-0.9628	0.0301	-0.1138	0.1962	41.4	58.6
t-7	-0.0014	-0.2080	0.0687	-0.5731	0.2910	52.3	47.7
t-6	0.0042	1.0736	0.0416	-0.1477	0.2040	51.4	48.6
t-5	0.0010	0.2244	0.0452	-0.3388	0.1305	56.8	43.2
t-4	-0.0032	-1.3090*	0.0260	-0.1344	0.1460	44.1	55.9
t-3	-0.0051	-1.8938**	0.0281	-0.1571	0.0945	44.1	55.9
t-2	0.0025	0.7594	0.0351	-0.1395	0.1518	55.0	45.0
t-1	0.0005	0.1240	0.0422	-0.3592	0.1437	57.7	42.3
t	0.0051	1.3210*	0.0407	-0.1250	0.3246	49.5	50.5
t+1	0.0026	0.7444	0.0374	-0.1064	0.2960	53.2	46.8
t+2	0.0031	0.7579	0.0436	-0.1566	0.2494	52.3	47.7
t+3	-0.0044	-1.3562*	0.0341	-0.1911	0.1028	43.2	56.8
t+4	-0.0009	-0.3326	0.0273	-0.1082	0.1060	46.8	53.2
t+5	0.0000	0.0016	0.0226	-0.0595	0.1317	52.3	47.7
t+6	-0.0047	-1.0750	0.0463	-0.2560	0.1630	56.8	43.2
t+7	-0.0022	-0.6307	0.0362	-0.1556	0.1794	47.7	52.3
t+8	-0.0040	-1.5485*	0.0272	-0.1848	0.0916	45.0	55.0
t+9	-0.0012	-0.5047	0.0256	-0.1381	0.0836	45.9	54.1
t+10	-0.0013	-0.5739	0.0237	-0.1487	0.0628	50.5	49.5

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	0.0064	1.6429*	0.0410	-0.0976	0.2551	46.8	53.2
t-8 to t-7	-0.0041	-0.5601	0.0773	-0.5709	0.3769	48.6	51.4
t-6 to t-5	0.0052	0.9382	0.0584	-0.3407	0.2075	56.8	43.2
t-4 to t-3	-0.0083	-2.2986**	0.0380	-0.1589	0.1487	44.1	55.9
t-2 to t-1	0.0030	0.5735	0.0556	-0.3597	0.2671	56.8	43.2
t to t+1	0.0077	1.5156*	0.0538	-0.1383	0.3262	49.5	50.5
t+2 to t+3	-0.0013	-0.2185	0.0609	-0.1895	0.3522	44.1	55.9
t+4 to t+5	-0.0009	-0.2491	0.0362	-0.1101	0.1363	46.8	53.2
t+6 to t+7	-0.0069	-1.6461*	0.0441	-0.2550	0.1100	48.6	51.4
t+8 to t+9	-0.0052	-1.4370*	0.0383	-0.1877	0.1354	43.2	56.8

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 111 resignation of director announcements from 1993-1999 for which NZSE announcement date and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

Table 4.19 Mean abnormal returns associated with director changes: Retirement announcements.

A. Daily Mean abnormal returns							
Day	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10	-0.0186	-0.6963	0.1748	-1.1308	0.0698	53.5	46.5
t-9	-0.0231	-0.8391	0.1802	-1.1531	0.1324	51.2	48.8
t-8	-0.0290	-1.1060	0.1720	-1.1183	0.0610	51.2	48.8
t-7	-0.0315	-1.1508	0.1792	-1.1529	0.0459	58.1	41.9
t-6	-0.0257	-0.9580	0.1761	-1.1402	0.0838	46.5	53.5
t-5	-0.0340	-1.2816	0.1739	-1.1129	0.0493	44.2	55.8
t-4	-0.0228	-0.9062	0.1651	-1.0668	0.1242	53.5	46.5
t-3	-0.0194	-0.7556	0.1683	-1.0886	0.1154	65.1	34.9
t-2	-0.0280	-1.1352	0.1618	-1.0571	0.0394	46.5	53.5
t-1	-0.0258	-1.0885	0.1555	-1.0160	0.0502	37.2	62.8
t	-0.0268	-1.0075	0.1747	-1.1408	0.0433	37.2	62.8
t+1	-0.0288	-1.0696	0.1763	-1.1453	0.1004	41.9	58.1
t+2	-0.0331	-1.2360	0.1754	-1.1501	0.0262	37.2	62.8
t+3	-0.0252	-0.9179	0.1800	-1.1682	0.0690	46.5	53.5
t+4	-0.0267	-1.0135	0.1729	-1.1180	0.1004	53.5	46.5
t+5	-0.0281	-1.0498	0.1757	-1.1415	0.0821	44.2	55.8
t+6	-0.0218	-0.8216	0.1741	-1.1293	0.0878	53.5	46.5
t+7	-0.0274	-1.0287	0.1744	-1.1383	0.0714	44.2	55.8
t+8	-0.0258	-0.9705	0.1745	-1.1387	0.0549	46.5	53.5
t+9	-0.0294	-1.0425	0.1846	-1.1983	0.1225	41.9	58.1
t+10	-0.0265	-1.0046	0.1728	-1.1262	0.0617	41.9	58.1

B. The two-day Cumulative AR Portfolio							
Period	AR	*t*-stat	SD	Min	Max	Prop: +ve	Prop: -ve
t-10 to t-9	-0.0416	-0.7738	0.3527	-2.2839	0.1386	58.1	41.9
t-8 to t-7	-0.0605	-1.1336	0.3498	-2.2713	0.0644	55.8	44.2
t-6 to t-5	-0.0597	-1.1342	0.3453	-2.2531	0.0994	34.9	65.1
t-4 to t-3	-0.0422	-0.8317	0.3327	-2.1554	0.2396	60.5	39.5
t-2 to t-1	-0.0538	-1.1158	0.3163	-2.0731	0.0450	37.2	62.8
t to t+1	-0.0556	-1.0422	0.3498	-2.2861	0.1344	30.2	69.8
t+2 to t+3	-0.0583	-1.0784	0.3542	-2.3183	0.0659	46.5	53.5
t+4 to t+5	-0.0548	-1.0364	0.3470	-2.2596	0.1260	46.5	53.5
t+6 to t+7	-0.0492	-0.9276	0.3477	-2.2676	0.0920	51.2	48.8
t+8 to t+9	-0.0552	-1.0101	0.3582	-2.3371	0.1526	41.9	58.1

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of 21-day test period after performing the event study with 200-day estimation period of 43 retirement of director appointment announcements from 1993-1999 for which NZSE announcement day and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is t-statistic, SD is standard deviation, MIN is minimum AR in group, MAX is maximum AR in group, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

4.5.7 Comparison between different type of directors announcements

After analysing each type of director announcement individually, this section compares the cumulative abnormal return among these groups. This comparison is demonstrated in Figure 4.3.

Figure 4.3 presents that the cumulative abnormal return of appointment of directors and resignation announcements move closely at the same level. In contrast, the cumulative abnormal return for the retirement announcements shows a steadily decreasing return throughout the 21-day test period. This seems to suggest that investors view appointment and resignation of director announcements as a better signal of the direction of the future firms' performance than the retirement of director announcement.

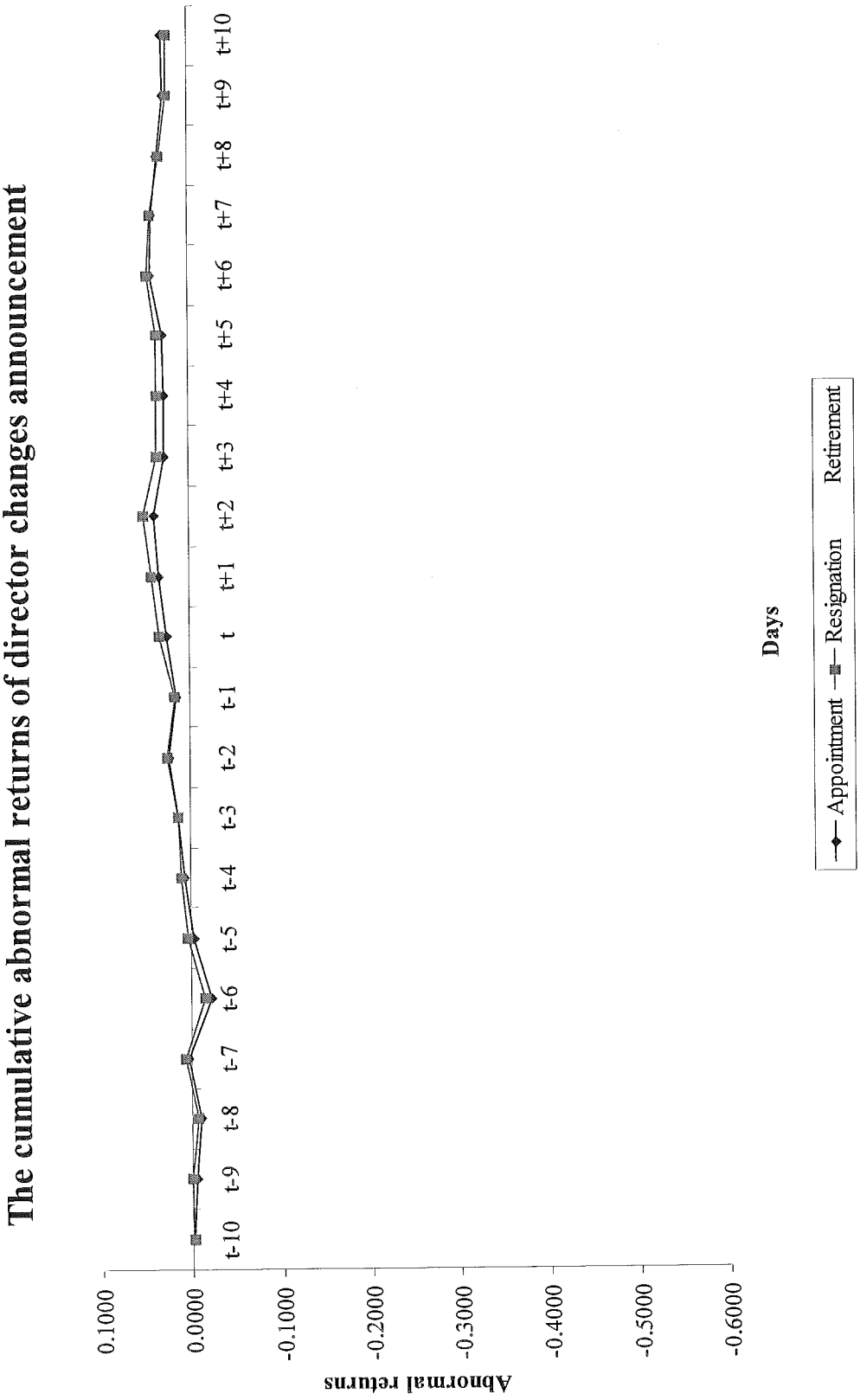

Figure 4.3 The daily abnormal returns of three types of director announcements: appointment, resignation and retirement.

4.6 Conclusion

After the analysis of top management announcements, the results observed in this study are summarised in Table 4.20. It shows that the announcement of changes in CEO/MD and chairperson has no significant effect on the share returns. However, this study found a significant positive abnormal return when the appointment of director and the resignation of director announcements are made.

Investors have indifferent expectations of the firm's future performance when New Zealand companies announce changes of CEO, MD and chairperson. However, they expect an improvement in the firm's performance when changes in directors are announced. Apart from that, investors also expect improvements in firms when directors resign.

In conclusion, as seen in all the sections analysed in this chapter, the effects of announcements on share returns vary depending on the positions of top management and the circumstances that cause the changes. The important finding that should be mentioned is the consistency found in this study with prior studies of the significant positive abnormal returns related to the announcement of the outside appointment of a director.

In addition to the effects of leadership changes and the circumstances surrounding them, firm size is also believed to effect share returns (Reingnum, 1985). Therefore, as this study has established that announcements of outside appointment of directors increase the firms' future expectation, the sample is further used to examine the effect of firm size on share returns. The results of this study are presented in the next chapter.

Table 4.20 The summary table of the event study result performed on the announcement of top management changes announcements.

Type of Announcement	Announcement Period Abnormal returns	Statistical significant
All changes	0.0042	Insignificant
All CEO/MD changes	0.0045	Insignificant
All CEO/MD appointments	0.0099	Insignificant
CEO/MD inside appointments	0.0136	Insignificant
CEO/MD outside appointments	0.0087	Insignificant
CEO/MD resignations	-0.0113	Insignificant
CEO/MD retirements	0.0188	Insignificant
All chairperson changes	-0.0134	Insignificant
All chairperson appointments	-0.0234	Insignificant
Chairperson inside appointments	-0.0448	Insignificant
Chairperson outside appointments	-0.0020	Insignificant
Chairperson resignations	-0.0123	Insignificant
Chairperson retirements	0.0203	Insignificant
All director changes	0.0054	Insignificant
All director appointments	0.179	Significant at 10% level
Director inside appointments	0.0105	Insignificant
Director outside appointments	0.0187	Insignificant
Director resignations	0.0077	Significant at 10% level
Directors retirements	-0.0556	Insignificant

5 Firm Size Effects

5.1 Introduction

Past researchers have observed different degrees of influence on share returns between large companies and small companies when they make announcements of changes in top management. It is believed that the effect of these changes on share returns is largely evidenced in small firms, rather than in large firms (Reingnum, 1985; Redikar and Seth, 1995). In this chapter, I attempt to discover any discernible differences in abnormal returns between large and small New Zealand companies during 1993-1999. For this purpose, companies belonging to the New Zealand Stock Exchange Top 40 Index (NZSE-40) are categorised as large companies and those belonging to New Zealand Stock Exchange Small Index (NZSE-SC) are categorised as small companies. The NZSE-40 index includes the top 40 companies according to combined market capitalisation, liquidity and turnover. The NZSE-SC index includes those companies which do not qualify for the NZSE-40 and have less offshore investment than companies in the main NZSE-40 index. However, since in the previous chapter a significant effect on share return is observed only with respect to announcements of changes in directors and because of the time constraint, I decided to focus on the analysis of firm size only on that sample.

Table 5.1 provides a summary of announcements made be these companies. Out of all the announcements, the majority (62 per cent) has been made by NZSE-SC companies, while NZSE-40 companies contributed only 38 per cent. This difference may be attributable to the difference in populations. Out of 342 all types of director announcements, 37 per cent of the announcements were made by NZSE-40 companies and 63 per cent released by NZSE-SC companies. This chapter concentrates only on the appointment of directors. Between 1993 and 1999, NZSE-40 companies have appointed 65 directors, of which 8 appointments are internal and the

balance 57 are external. On the other hand, NZSE-SC companies announced 123 appointments, almost twice the number of appointments made by large companies, of which only 11 are inside and a majority 112 are outside.

Table 5.1 The stratification of the samples.

Types of announcement	NZSE-40	NZSE-SC	TOTAL
All announcements of top management change	170 (38%)	279 (62%)	449
All director announcements	126 (37%)	216 (63%)	342
All director appointments	65 (35%)	123 (65%)	188
Inside director appointments	8 (42%)	11 (58%)	19
Outside director appointments	57 (34%)	112 (66%)	169

This chapter is constructed as follows. In the next section, the results of all announcements made by NZSE-40 and NZSE-SC companies are reported to provide a general picture of differences in market response between large and small companies. Section 5.3 discusses results for all director announcements. The effects of appointments of directors on the share returns of NZSE-40 and NZSE-SC are then presented in section 5.4. In section 5.5, the findings for inside director appointments are reported while the findings for outside appointments are discussed in section 5.6. Within each of these sections, the corresponding graphs of cumulative abnormal returns for both groups are shown. Finally, the summary of the findings is drawn in section 5.7.

5.2 All top management change announcements of NZSE-40 and NZSE-SC companies

Before analysing the sub-sample of director changes, the samples of 170 NZSE-40 and 279 NZSE-SC top management change announcements are analysed. Table 5.2 shows the results of the abnormal returns found during the 21-day period. Panel A.1

of Table 5.2 shows that throughout this period, no significant abnormal return is observed. An insignificant abnormal return of –0.86 per cent is reported on the announcement day for NZSE-40 with an associated *t*-statistic of –1.2354. A similar insignificant negative result is also observed on the day immediately following the announcement with a value of –0.72 per cent and *t*-statistic of –1.0368. Fifty-two per cent of the firms report negative abnormal returns on this day. This result suggests that changes in top management in large New Zealand companies have no effect on investors' expectation on such companies' future firm performance.

In contrast, the daily mean abnormal return of NZSE-SC, as presented in Panel A.2, shows a positive and significant abnormal return of 1.09 per cent, with a *t*-statistic of 2.0485 on the announcement day. Equal proportions of the firms in the sample report positive and negative abnormal returns on this day. In addition, on days t+1 and t+2, the abnormal returns observed are also positive and significant with the values of 0.56 per cent and 0.38 per cent. The corresponding *t*-statistics are 1.4890 and 1.4503. These results suggest that the investors expect changes in top management in the small companies to result in an improvement of future firm performance.

Furthermore, the result of two-day portfolios of NZSE-40 and NZSE-SC are presented in Panel B.1 and B.2 of Table 5.2 respectively. Panel B.1 shows that during the announcement period, the abnormal return of the large NZ companies is insignificantly negative, with a value of –1.58 per cent and a *t*-statistic of –1.1575. A similar result of insignificant negative abnormal return is also found during the period immediately following the announcement. The abnormal return of –1.62 per cent and a *t*-statistic of –1.1766 are found, with 58 per cent of the firms experiencing negative abnormal returns. This confirms the finding of daily abnormal return that there is no significant impact on share returns from changes in top management of large companies.

On the other hand, in Panel B.2, the NZSE-SC group reports a significant positive abnormal return during the two-day announcement period, with an associated *t*-statistic of 1.9926. However, during days t+2 to t+3, an insignificant negative abnormal return is found, with a *t*-statistic of –0.2285. This suggests that when the

news of the change in top management in the small companies is released to the market, investors tend to have a positive expectation of the firm's performance.

Figure 5.1 shows cumulative abnormal returns over a 21-day period of NZSE-40 and NZSE-SC companies. It is observed that the trend of the abnormal return of the small companies is positive and increasing, while the trend of the large companies tends toward negative and steadily decreasing.

The findings of this study are consistent with Reingnum (1985) and Rediker and Seth (1995). It also supports the findings of Rosenstein and Wyatt (1990), who find a significant positive abnormal return of 0.34 per cent for small firms, while observing insignificant returns for large firms.

Table 5.2 Abnormal returns of NZSE-40 and NZSE-SC companies following all top management change announcements.

Day	A.1 Daily mean abnormal returns of NZSE0-40					A.2 Daily mean abnormal returns of NZSE-SC				
	AR	SD	*t*-stat	Prop: +ve	Prop : -ve	AR	SD	*t*-stat	Prop: +ve	Prop : -ve
t-10	**-0.0064**	0.0896	-0.9327	51	49	**0.0002**	0.0295	0.1160	48	52
t-9	**-0.0084**	0.0909	-1s.2084	50	50	**0.0024**	0.0720	0.5454	50	50
t-8	**-0.0061**	0.0879	-0.9025	46	54	**-0.0061**	0.0907	-1.1284	45	55
t-7	**-0.0074**	0.0902	-1.0714	52	48	**0.0076**	0.1154	1.1066	54	46
t-6	**-0.0080**	0.0889	-1.1762	46	54	**-0.0139**	0.3738	-0.6220	51	49
t-5	**-0.0046**	0.0875	-0.6898	51	49	**0.0099**	0.1713	0.9633	52	48
t-4	**-0.0064**	0.0836	-1.0033	47	53	**0.0065**	0.0969	1.1198	50	50
t-3	**-0.0065**	0.0852	-0.9897	53	47	**0.0057**	0.1232	0.7702	49	51
t-2	**-0.0072**	0.0826	-1.1345	48	52	**0.0091***	0.0988	1.5386	55	45
t-1	**-0.0042**	0.0804	-0.6765	48	52	**-0.0077**	0.1281	-0.9976	52	48
t	**-0.0086**	0.0906	-1.2354	41	59	**0.0109****	0.0888	2.0485	50	50
t+1	**-0.0072**	0.0908	-1.0368	48	52	**0.0056***	0.0624	1.4890	53	47
t+2	**-0.0084**	0.0898	-1.2145	41	59	**0.0038***	0.0440	1.4503	52	48
t+3	**-0.0079**	0.0920	-1.1145	47	53	**-0.0061**	0.1602	-0.6312	47	53
t+4	**-0.0069**	0.0872	-1.0287	49	51	**-0.0015**	0.0364	-0.6928	44	56
t+5	**-0.0053**	0.0900	-0.7748	52	48	**0.0016**	0.0337	0.8158	51	49
t+6	**-0.0049**	0.0882	-0.7318	52	48	**0.0074**	0.1528	0.8082	52	48
t+7	**-0.0065**	0.0892	-0.9440	46	54	**-0.0008**	0.0686	-0.1929	49	51
t+8	**-0.0087**	0.0888	-1.2790	42	58	**-0.0065**	0.0972	-1.1136	48	52
t+9	**-0.0087**	0.0943	-1.2080	44	56	**-0.0052**	0.0968	-0.8951	44	56
t+10	**-0.0053**	0.0884	-0.7795	48	52	**0.0015**	0.0573	0.4312	51	49

Period	B.1 The two-day cumulative AR portfolio of NZSE-40					B.2 The two-day cumulative AR portfolio of NZSE-SC				
	AR	SD	*t*-stat	Prop :+ve	Prop :-ve	AR	SD	*t*-stat	Prop :+ve	Prop : -ve
t-10 to t-9	**-0.0148**	0.1780	-1.0872	44	56	**0.0026**	0.0797	0.5361	51	49
t-8 to t-7	**-0.0135**	0.1763	-0.9984	45	55	**0.0015**	0.0741	0.3417	51	49
t-6 to t-5	**-0.0126**	0.1746	-0.9446	46	54	**-0.0040**	0.2141	-0.3154	54	46
t-4 to t-3	**-0.0129**	0.1665	-1.0100	49	51	**0.0122**	0.2135	0.9524	48	52
t-2 to t-1	**-0.0114**	0.1612	-0.9184	49	51	**0.0014**	0.0651	0.3717	54	46
t to t+1	**-0.0158**	0.1781	-1.1575	44	56	**0.0165****	0.1379	1.9926	51	49
t+2 to t+3	**-0.0162**	0.1798	-1.1766	42	58	**-0.0022**	0.1631	-0.2285	51	49
t+4 to t+5	**-0.0122**	0.1756	-0.9077	50	50	**0.0001**	0.0498	0.0456	46	54
t+6 to t+7	**-0.0114**	0.1759	-0.8456	51	49	**0.0066**	0.1165	0.9464	48	52
t+8 to t+9	**-0.0174**	0.1810	-1.2564	40	60	**-0.0117**	0.1853	-1.0517	46	54

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of a 21-day test period after performing the event study with a 200-day estimation period of 170 NZSE-40 and 279 NZSE-SC announcements of all changes in top management from 1993-1999 for which NZSE announcement dates and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t+1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is *t*-statistic, SD is standard deviation, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

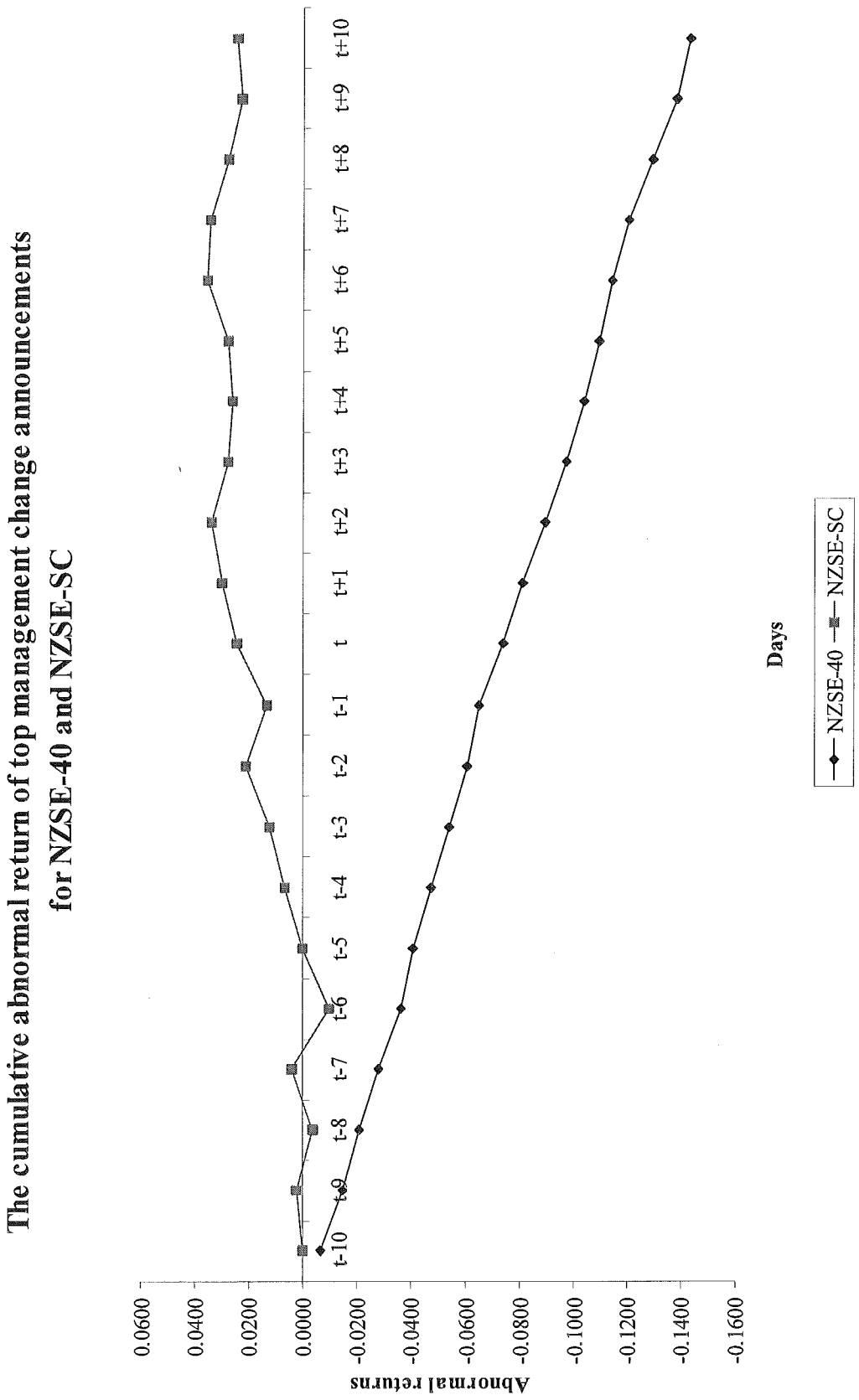

Figure 5.1 The cumulative abnormal returns of NZSE-40 and NZSE-SC companies following all top management change announcements.

5.3 All director announcements of NZSE-40 and NZSE-SC companies

Table 5.3 reports abnormal returns for all types of director change announcements. Panel A.1 shows the daily abnormal returns of the NZSE-40. Overall, it is found that insignificant negative abnormal returns are reported throughout the 21-day test period. On the announcement day, an insignificant negative abnormal return of –0.96 per cent, with a *t*-statistic of –1.0275, is reported. Panel A.1 also shows that 55 per cent of firms experience negative abnormal returns, while 45 per cent experience positive abnormal returns. Furthermore, a similar insignificant abnormal return of –0.96 per cent is also observed on the day immediately following the announcement with a *t*-statistic of –1.0284.

In contrast to the insignificant abnormal return observed for the large firms, Panel A.2 shows that NZSE-SC firms experience a significant positive abnormal return of 1.21 per cent with a *t*-statistic of 1.8150 on the announcement day. Only 48 per cent of the firms in the sample show positive abnormal returns on the same day, while 52 per cent show negative abnormal returns. In addition, significant abnormal returns are also present on days t+1 and t+2, with values of 0.76 per cent and 0.54 per cent respectively. The corresponding *t*-statistics on these days are 1.7018 and 1.7715, which indicate statistical significance at the 5 per cent level.

After daily abnormal returns were considered, the two-day portfolios were also examined. During the announcement period, an insignificant abnormal return of –1.92 per cent is found for NZSE-40 companies, as shown in Panel B.1, with a *t*-statistic of –1.0446. During day t+2 to t+3, an abnormal return of –1.88 per cent is observed, which is also insignificant. On the other hand, in Panel B.2, a highly significant abnormal return of 1.97 per cent, with a *t*-statistic of 1.9144, is found for NZSE-SC companies during the announcement period. However, during the period immediately following the announcement, the NZSE-SC companies experience a slightly insignificant negative abnormal return of –0.65 per cent, with a *t*-statistic of –0.5285.

Furthermore, the graph of cumulative abnormal returns of NZSE-40 and NZSE-SC is shown in Figure 5.2. It shows that the abnormal return reported by NZSE-40 was negative for the entire test period. In contrast, NZSE-SC companies show a sharp increase in positive abnormal returns on the day of the announcement and this upward trend prevails for three consecutive days.

The results presented in Table 5.3 suggest that the investors' view is positive toward the director changes announcements in the small New Zealand companies. This suggests that investors anticipate an improvement in the firms' performance subsequent to these changes. However, the investors of large New Zealand firms seem to expect such announcements to have no substantial impact on the firms' performance. This is demonstrated by the abnormal return which shows a declining trend during the pre-announcement period and a continuing decline during both the announcement and the post-announcement periods. In addition, the investors' view towards the future firm performance of the large companies continues to be negative after the change of directors. This suggestion is consistent with Reingnum (1985) and Rediker and Seth (1995), who suggest that the small firms tend to have less complex control structures, and therefore the effect of a change in one management position is more meaningful. It also supports the finding of Rosenstein and Wyatt (1990), who find a significant positive abnormal return of 0.34 per cent for small firms, while observing insignificant returns for large firms.

Table 5.3 Abnormal returns of NZSE-40 and NZSE-SC companies following all director announcements.

Day	A.1 Daily Mean abnormal returns of NZSE0-40					A.2 Daily Mean abnormal returns of NZSE-SC				
	AR	SD	t-stat	Prop: +ve	Prop : -ve	AR	SD	t-stat	Prop: +ve	Prop : -ve
t-10	**-0.0084**	0.0092	-0.9096	49	51	**0.0000**	0.0022	-0.0101	46	54
t-9	**-0.0106**	0.0093	-1.1326	52	48	**0.0014**	0.0054	0.2659	50	50
t-8	**-0.0084**	0.0090	-0.9262	45	55	**-0.0060**	0.0069	-0.8739	45	55
t-7	**-0.0087**	0.0093	-0.9383	56	44	**0.0101**	0.0088	1.1426	52	48
t-6	**-0.0090**	0.0092	-0.9824	49	51	**-0.0204**	0.0289	-0.7084	50	50
t-5	**-0.0058**	0.0090	-0.6424	52	48	**0.0133**	0.0132	1.0084	52	48
t-4	**-0.0078**	0.0086	-0.9050	48	52	**0.0071**	0.0073	0.9690	49	51
t-3	**-0.0089**	0.0088	-1.0106	53	47	**0.0053**	0.0094	0.5622	45	55
t-2	**-0.0104**	0.0085	-1.2311	46	54	**0.0111***	0.0075	1.4709	53	47
t-1	**-0.0070**	0.0083	-0.8502	46	54	**-0.0088**	0.0098	-0.9021	53	47
t	**-0.0096**	0.0093	-1.0275	45	55	**0.0121****	0.0066	1.8150	48	52
t+1	**-0.0096**	0.0094	-1.0284	49	51	**0.0076****	0.0045	1.7018	54	46
t+2	**-0.0103**	0.0093	-1.1168	43	57	**0.0054****	0.0031	1.7715	52	48
t+3	**-0.0084**	0.0094	-0.8940	52	48	**-0.0120**	0.0123	-0.9759	44	56
t+4	**-0.0094**	0.0090	-1.0456	48	52	**-0.0002**	0.0026	-0.0883	46	54
t+5	**-0.0077**	0.0093	-0.8368	53	47	**-0.0002**	0.0024	-0.0846	48	52
t+6	**-0.0062**	0.0091	-0.6796	53	47	**0.0087**	0.0117	0.7425	51	49
t+7	**-0.0094**	0.0092	-1.0256	46	54	**-0.0019**	0.0051	-0.3620	48	52
t+8	**-0.0104**	0.0091	-1.1319	45	55	**-0.0068**	0.0074	-0.9120	48	52
t+9	**-0.0116**	0.0097	-1.1949	43	57	**-0.0060**	0.0074	-0.8129	42	58
t+10	**-0.0080**	0.0091	-0.8848	48	52	**0.0008**	0.0043	0.1873	48	52

Period	B.1 The two-day Cumulative AR Portfolio of NZSE-40					B.2 The two-day Cumulative AR Portfolio of NZSE-SC				
	AR	SD	t-stat	Prop: +ve	Prop: -ve	AR	SD	t-stat	Prop: +ve	Prop: -ve
t-10 to t-9	**-0.0190**	0.0183	-1.0347	44	56	**0.0014**	0.0060	0.2364	51	49
t-8 to t-7	**-0.0171**	0.0182	-0.9400	49	51	**0.0041**	0.0055	0.7451	50	50
t-6 to t-5	**-0.0148**	0.0181	-0.8201	51	49	**-0.0072**	0.0165	-0.4338	52	48
t-4 to t-3	**-0.0167**	0.0172	-0.9680	52	48	**0.0124**	0.0164	0.7548	44	56
t-2 to t-1	**-0.0175**	0.0166	-1.0514	47	53	**0.0023**	0.0047	0.4801	54	46
t to t+1	**-0.0192**	0.0184	-1.0446	45	55	**0.0197****	0.0103	1.9114	51	49
t+2 to t+3	**-0.0188**	0.0186	-1.0124	46	54	**-0.0065**	0.0123	-0.5285	50	50
t+4 to t+5	**-0.0171**	0.0181	-0.9455	49	51	**-0.0004**	0.0036	-0.1194	43	57
t+6 to t+7	**-0.0156**	0.0182	-0.8588	50	50	**0.0069**	0.0089	0.7751	47	53
t+8 to t+9	**-0.0219**	0.0187	-1.1740	42	58	**-0.0128**	0.0143	-0.8958	46	54

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of a 21-day test period after performing the event study with a 200-day estimation period of 126 NZSE-40 and 216 NZSE-SC all director announcements from 1993-1999 for which NZSE announcement dates and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t+1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is *t*-statistic, SD is standard deviation, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

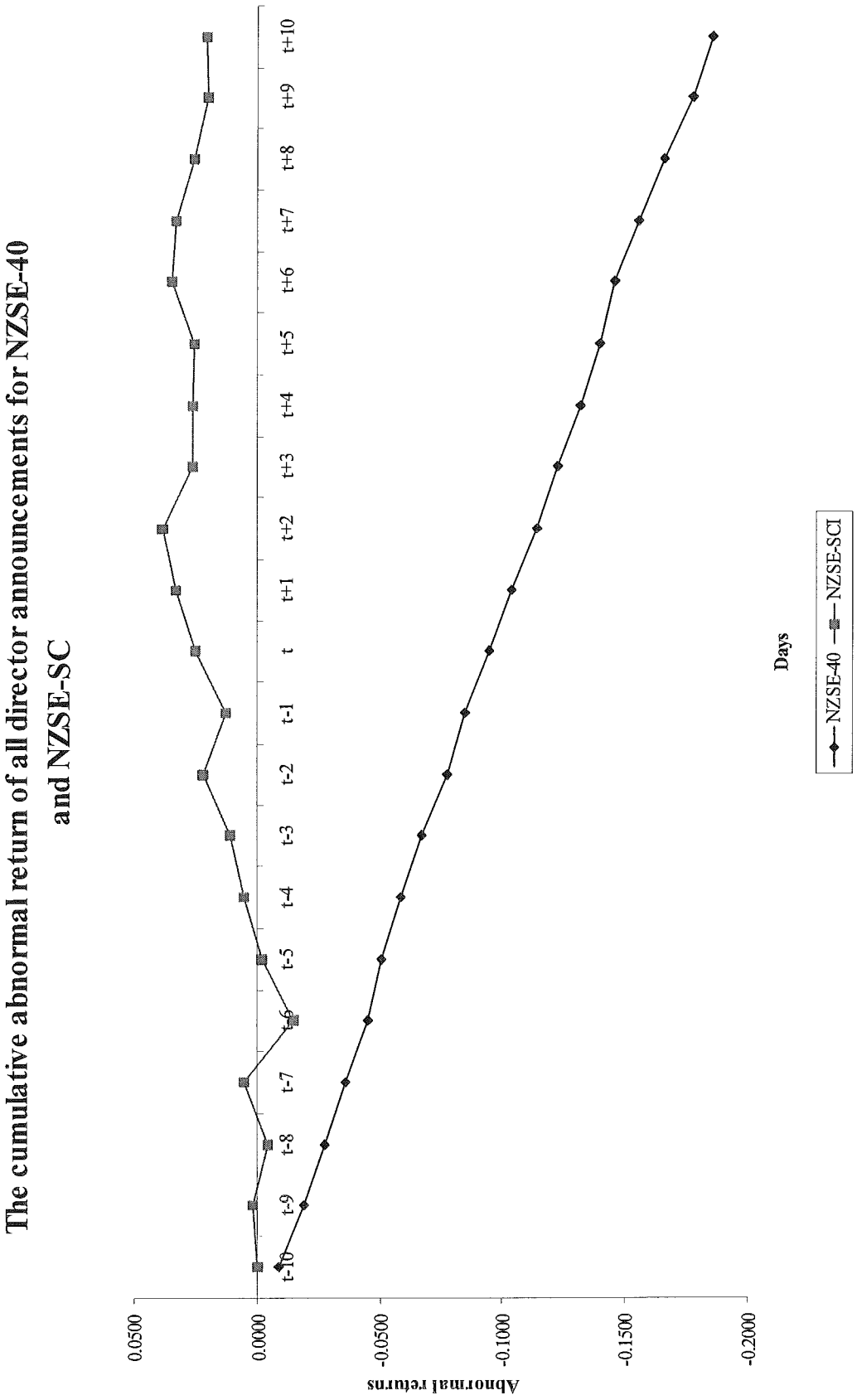

Figure 5.2 The cumulative abnormal returns of NZSE-40 and NZSE-SC companies following all director change announcements.

5.4 All director appointment announcements of NZSE-40 and NZSE-SC companies

The samples of 65 NZSE-40 and 123 NZSE-SC appointment of directors announcements are examined and the results are presented in Table 5.4. In Panel A.1, an insignificant negative abnormal return of –0.10 per cent is reported by NZSE-40 companies on the announcement day, with a *t*-statistic of –0.2550. However, 51 per cent of firms reported positive abnormal returns on the same day. An insignificant negative abnormal return of –0.05 per cent is also observed on the day following the announcements. However, it should be noted that on the day before the announcement the abnormal return is slightly positive, but insignificant at 0.28 per cent. These results show that although no significant effect is found when the announcement is released to the market by large firms, the trend of abnormal returns is negative during the announcement period. This shows that the changes have a slightly negative impact on expectations of future firm performance.

In contrast to the result of insignificant abnormal return reported for NZSE-40, Panel A.2 shows a significant positive abnormal return of 1.67 per cent for NZSE-SC companies on the announcement day (with a *t*-statistic of 1.4951). However, a minority of 46 per cent of the firms in the sample reported positive abnormal returns. In addition, on days t+1 and t+2 significant positive abnormal returns of 1.15 per cent and 0.72 per cent are also observed for these small firms, with associated *t*-statistics of 1.5918 and 1.8382 respectively.

When two-day intervals are considered, Panel B.1 shows an insignificant negative abnormal return of –0.15 per cent during the period of announcement for large firms (with a *t*-statistic of –0.3080). However, it should be noted that four periods leading to the announcement period show positive, but insignificant, abnormal returns of 0.12 per cent, 0.08 per cent, 0.10 per cent and 0.06 per cent respectively. Despite the negative abnormal returns found in the announcement period, the period after that period shows insignificant positive abnormal returns of 0.19 per cent, 0.17 per cent and 0.30 per cent during t+2 to t+3, t+4 to t+5 and t+6 to t+7 respectively. This shows that although the investors' reaction toward the change in directors in large firms is

negative on the announcement, investors anticipate an improvement in the firm's performance after the change is made. In contrast to the results found in NZSE-40 companies, a significant positive abnormal return of 2.82 per cent, with a *t*-statistic of 1.6087, is reporting by the NZSE-SC during the announcement period. A majority of 52 per cent of the firms reported positive abnormal returns, while 48 per cent reporting negative abnormal returns. Apart from that, it should be noted that the two periods preceding the announcement period show positive, however insignificant, abnormal returns of 2.64 per cent and 0.19 per cent. While the abnormal return during the announcement period is positive, the abnormal return during the period immediately following the announcement shows a slightly negative value.

Figure 5.3 shows the cumulative abnormal returns for these companies. The cumulative abnormal returns of NZSE-40 companies moved around zero during this 21-day test period. However, cumulative abnormal returns of small companies are positive in 16 days. Clearly, these companies have outperformed their large counterparts during this 21-days test period. The results of the effect of all directors appointment announcement on share returns of NZSE-40 and NZSE-SC companies show that the investors expect small firms to improve performance after a change in directors, while they have no significant expectation concerning firm performance of large firms.

The results found in this study are consistent with prior research of Rosenstein and Wyatt (1990), Reingnum (1985) and Rediker and Seth (1995). They suggested that the investors expect the appointment of a new director in a small companies to have a higher impact on the firm's performance than in large firms.

Table 5.4 Abnormal returns of NZSE-40 and NZSE-SC companies following all director appointment announcements.

Day	A.1 Daily mean abnormal returns of NZSE-40					A.2 Daily mean abnormal returns of NZSE-SC				
	AR	SD	*t*-stat	Prop: +ve	Prop: -ve	AR	SD	*t*-stat	Prop: +ve	Prop: -ve
t-10	**-0.0018**	0.0033	-0.5470	52	48	**-0.0021**	0.0035	-0.6013	44	56
t-9	**0.0006**	0.0023	0.2550	60	40	**-0.0054**	0.0089	-0.6135	46	54
t-8	**0.0015**	0.0023	0.6367	49	51	**-0.0073**	0.0118	-0.6186	44	56
t-7	**-0.0003**	0.0024	-0.1271	57	43	**0.0212***	0.0142	1.4888	50	50
t-6	**-0.0001**	0.0021	-0.0428	51	49	**-0.0399**	0.0506	-0.7893	48	52
t-5	**0.0009**	0.0019	0.4782	52	48	**0.0279**	0.0227	1.2296	51	49
t-4	**0.0021**	0.0021	0.9915	57	43	**0.0142**	0.0126	1.1307	46	54
t-3	**-0.0012**	0.0027	-0.4415	51	49	**0.0122**	0.0164	0.7440	44	56
t-2	**-0.0022**	0.0019	-1.1367	46	54	**0.0175***	0.0129	1.3558	50	50
t-1	**0.0028**	0.0028	1.0001	51	49	**-0.0156**	0.0168	-0.9281	48	52
t	**-0.0010**	0.0041	-0.2550	51	49	**0.0167***	0.0112	1.4951	46	54
t+1	**-0.0005**	0.0034	-0.1493	52	48	**0.0115***	0.0072	1.5918	55	45
t+2	**0.0010**	0.0023	0.4239	45	55	**0.0072****	0.0039	1.8382	51	49
t+3	**0.0009**	0.0020	0.4720	55	45	**-0.0174**	0.0214	-0.8137	45	55
t+4	**0.0009**	0.0018	0.4893	51	49	**-0.0003**	0.0037	-0.0941	43	57
t+5	**0.0009**	0.0027	0.3195	52	48	**0.0011**	0.0038	0.2874	48	52
t+6	**0.0030***	0.0020	1.5012	54	46	**0.0193**	0.0202	0.9534	46	54
t+7	**-0.0001**	0.0026	-0.0275	48	52	**-0.0014**	0.0085	-0.1601	47	53
t+8	**-0.0003**	0.0021	-0.1627	51	49	**-0.0097**	0.0129	-0.7528	46	54
t+9	**-0.0021**	0.0023	-0.8974	43	57	**-0.0099**	0.0128	-0.7766	38	62
t+10	**0.0012**	0.0021	0.5815	54	46	**0.0030**	0.0073	0.4064	45	55

Period	B.1 The two-day cumulative AR portfolio of NZSE-40					B.2 The two-day cumulative AR portfolio of NZSE-SC				
	AR	SD	t-stat	Prop: +ve	Prop: -ve	AR	SD	t-stat	Prop: +ve	Prop: -ve
t-10 to t-9	**-0.0012**	0.0037	-0.3337	52	48	**-0.0075**	0.0098	-0.7649	46	54
t-8 to t-7	**0.0012**	0.0035	0.3440	49	51	**0.0138***	0.0064	2.1618	50	50
t-6 to t-5	**0.0008**	0.0029	0.2924	51	49	**-0.0120**	0.0285	-0.4202	54	46
t-4 to t-3	**0.0010**	0.0028	0.3407	49	51	**0.0264**	0.0285	0.9253	45	55
t-2 to t-1	**0.0006**	0.0035	0.1691	46	54	**0.0019**	0.0069	0.2717	54	46
t to t+1	**-0.0015**	0.0050	-0.3080	54	46	**0.0282***	0.0175	1.6087	52	48
t+2 to t+3	**0.0019**	0.0033	0.5799	49	51	**-0.0102**	0.0211	-0.4838	52	48
t+4 to t+5	**0.0017**	0.0035	0.4965	46	54	**0.0007**	0.0053	0.1388	43	57
t+6 to t+7	**0.0030**	0.0033	0.8876	52	48	**0.0179**	0.0150	1.1911	45	55
t+8 to t+9	**-0.0024**	0.0029	-0.8386	45	55	**-0.0196**	0.0249	-0.7894	47	53

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of a 21-day test period after performing the event study with a 200-day estimation period of 65 NZSE-40 and 123 NZSE-SC all director appointment announcements from 1993-1999 for which NZSE announcement dates and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is *t*-statistic, SD is standard deviation, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

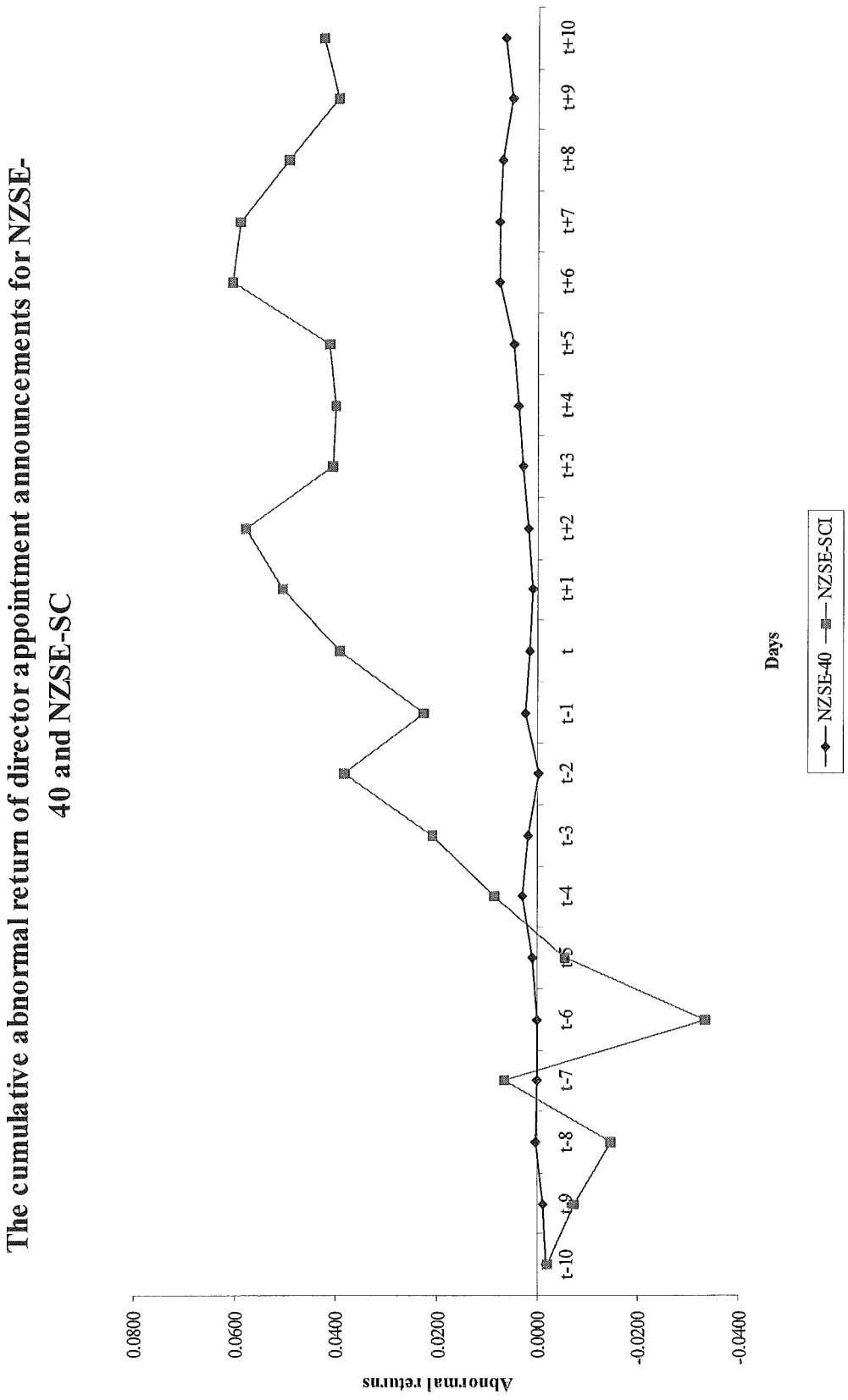

Figure 5.3 The cumulative abnormal returns of NZSE-40 and NZSE-SC companies following all director appointment announcements.

5.5 All inside appointment of director announcements of NZSE-40 and NZSE-SC

Table 5.5 shows the results of the event study performed on the samples of 8 and 11 inside appointment of director announcements made by NZSE-40 and NZSE-SC companies respectively. A positively insignificant abnormal return of 1.13 per cent, with a standard deviation of 0.0149, and an associated *t*-statistic of 0.7574, is found on the announcement day of inside appointments of directors by NZSE-40 companies, as shown in Panel A.1. It is observed that equal proportions of firms report positive abnormal returns and negative abnormal returns on the day the announcement is made. In addition, on the day after the announcement day, an insignificantly positive abnormal return of 0.36 per cent is also observed, with a *t*-statistic of 0.2396. It should also be noted that the abnormal return changes from slightly negative on the day before the announcement to slightly positive on the day of the announcement. This suggests that appointments of inside directors in large firms create a slightly positive expectation among investors concerning the firm's future performance.

In Panel A.2, we find that the announcement day abnormal return is negative and insignificant at –1.69 per cent for NZSE-SC companies, with a high standard deviation of 0.0167 and a *t*-statistic of –1.0168. It also shows that the majority of the firms in the sample report negative abnormal returns on day t. However, on the day immediately following the announcement, a significant positive abnormal return of 2.42 per cent is reported (*t*-statistic of 2.1718), with 64 per cent of firms in the sample reporting positive abnormal returns. This shows that appointments of inside directors in small companies create a positive expectation on future firm performance.

Although no significant abnormal returns are found on daily basis, Panel B.1 in Table 5.5 shows a highly significant positive abnormal return of 1.49 per cent with a *t*-statistic of 2.0511 during the announcement period for NZSE-40 companies. A high proportion of 75 per cent of the firms in the sample reports positive abnormal returns, while 25 per cent reports negative abnormal returns. During days t+2 and t+3, an insignificant abnormal return of –0.79 per cent is observed.

On the other hand, although a significant daily abnormal return of 2.42 per cent is reported on day t+1 by NZSE-SC companies when two-day intervals are considered, an insignificant abnormal return of 0.72 per cent is reported during the announcement period (with a *t*-statistic of 0.5506) in Panel A.2. Fifty-five per cent of the firms in the sample report positive abnormal returns, while 45 per cent report negative abnormal returns. Similarly, an insignificant abnormal return of 1.13 per cent is also observed during the immediate post-announcement period. This result suggests that although the impact of the change in director is not significant, the investors still have some positive expectations of small firms' future performance.

In addition, the cumulative abnormal returns for inside director appointments of NZSE-40 and NZSE-SC companies are plotted in Figure 5.4. It shows that the cumulative abnormal return of NZSE-SC reports a large decline on the day of the announcement and improves immediately after the announcement is released to the market. On the other hand, NZSE-40 companies show an increase in abnormal return on the day of the announcement and the day following the event. However, the small companies seem to experience a higher increase in abnormal returns than do the large companies during the post-announcement period.

These findings of abnormal returns during the announcement period show that investors seem to have a positive expectation on large firms when they announce appointments of inside directors. However, they seem to be indifferent toward small firms when a similar situation occurs. This result contrasts with Reingnum (1985) and Redikar and Seth (1995) who suggest that the impact of changes in director should be higher in small companies rather than large firms. However, it should be noted that these results are based on very small samples.

Table 5.5 Abnormal returns of NZSE-40 and NZSE-SC companies following inside director appointment announcements.

Day	A.1 Daily mean abnormal returns of NZSE-40					A.2 Daily mean abnormal returns of NZSE-SC				
	AR	SD	t-stat	Prop :+ve	Prop :-ve	AR	SD	t-stat	Prop :+ve	Prop :-ve
t-10	**-0.0108**	0.0080	-1.3456	25	75	**-0.0225**	0.0231	-0.9742	45	55
t-9	**-0.0054**	0.0053	-1.0194	50	50	**0.0148**	0.0124	1.1993	73	27
t-8	**0.0045**	0.0051	0.8939	50	50	**-0.0095**	0.0126	-0.7500	36	64
t-7	**0.0008**	0.0073	0.1140	75	25	**0.0100****	0.0046	2.1921	73	27
t-6	**0.0007**	0.0048	0.1538	50	50	**0.0161**	0.0146	1.0994	64	36
t-5	**0.0052**	0.0058	0.8921	63	38	**0.0154****	0.0084	1.8346	55	45
t-4	**0.0058**	0.0042	1.3660	63	38	**0.0015**	0.0052	0.2901	55	45
t-3	**0.0118***	0.0055	2.1501	75	25	**-0.0001**	0.0055	-0.0108	55	45
t-2	**0.0025**	0.0071	0.3536	50	50	**-0.0036**	0.0064	-0.5703	27	73
t-1	**-0.0054**	0.0062	-0.8739	38	63	**-0.0030**	0.0064	-0.4697	55	45
t	**0.0113**	0.0149	0.7574	50	50	**-0.0169**	0.0167	-1.0168	36	64
t+1	**0.0036**	0.0151	0.2396	63	38	**0.0242****	0.0111	2.1718	64	36
t+2	**-0.0056**	0.0047	-1.1889	25	75	**0.0143**	0.0080	1.7857	64	36
t+3	**-0.0024**	0.0079	-0.2974	50	50	**-0.0030**	0.0147	-0.2015	27	73
t+4	**0.0004***	0.0051	0.0685	38	63	**0.0055**	0.0127	0.4313	55	45
t+5	**-0.0080***	0.0054	-1.4738	25	75	**0.0028**	0.0084	0.3341	36	64
t+6	**-0.0017**	0.0023	-0.7214	25	75	**0.0020**	0.0073	0.2725	55	45
t+7	**-0.0004**	0.0055	-0.0694	50	50	**-0.0121**	0.0128	-0.9518	45	55
t+8	**-0.0001**	0.0036	-0.0325	38	63	**-0.0072**	0.0072	-1.0026	45	55
t+9	**0.0108***	0.0073	1.4693	50	50	**-0.0058**	0.0107	-0.5427	45	55
t+10	**0.0116****	0.0050	2.3215	75	25	**-0.0141**	0.0113	-1.2407	27	73

Period	B.1 The two-day cumulative AR portfolio of NZSE-40					B.2 The two-day cumulative AR portfolio of NZSE-SC				
	AR	SD	t-stat	Prop +ve	Prop -ve	AR	SD	t-stat	Prop +ve	Prop -ve
t-10 to t-9	**-0.0162**	0.0109	-1.4861	25	75	**-0.0077**	0.0171	-0.4503	45	55
t-8 to t-7	**0.0054**	0.0065	0.8281	75	25	**0.0005**	0.0150	0.0353	73	27
t-6 to t-5	**0.0059**	0.0085	0.6914	75	25	**0.0315**	0.0172 **	1.8346	73	27
t-4 to t-3	**0.0176****	0.0075	2.3555	63	38	**0.0014**	0.0053	0.2733	45	55
t-2 to t-1	**-0.0029**	0.0078	-0.3741	50	50	**-0.0066**	0.0078	-0.8451	45	55
t to t+1	**0.0149****	0.0073	2.0511	75	25	**0.0072**	0.0132	0.5506	55	45
t+2 to t+3	**-0.0079**	0.0125	-0.6369	38	63	**0.0113**	0.0195	0.5801	64	36
t+4 to t+5	**-0.0076**	0.0081	-0.9409	38	63	**0.0083**	0.0138	0.6023	55	45
t+6 to t+7	**-0.0021**	0.0058	-0.3591	38	63	**-0.0102**	0.0136	-0.7488	55	45
t+8 to t+9	**0.0106**	0.0100	1.0593	63	38	**-0.0130**	0.0104	-1.2488	36	64

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of a 21-day test period after performing the event study with a 200-day estimation period of 8 NZSE-40 and 11 NZSE-SC inside director appointment announcements from 1993-1999 for which NZSE announcement dates and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is *t*-statistic, SD is standard deviation, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

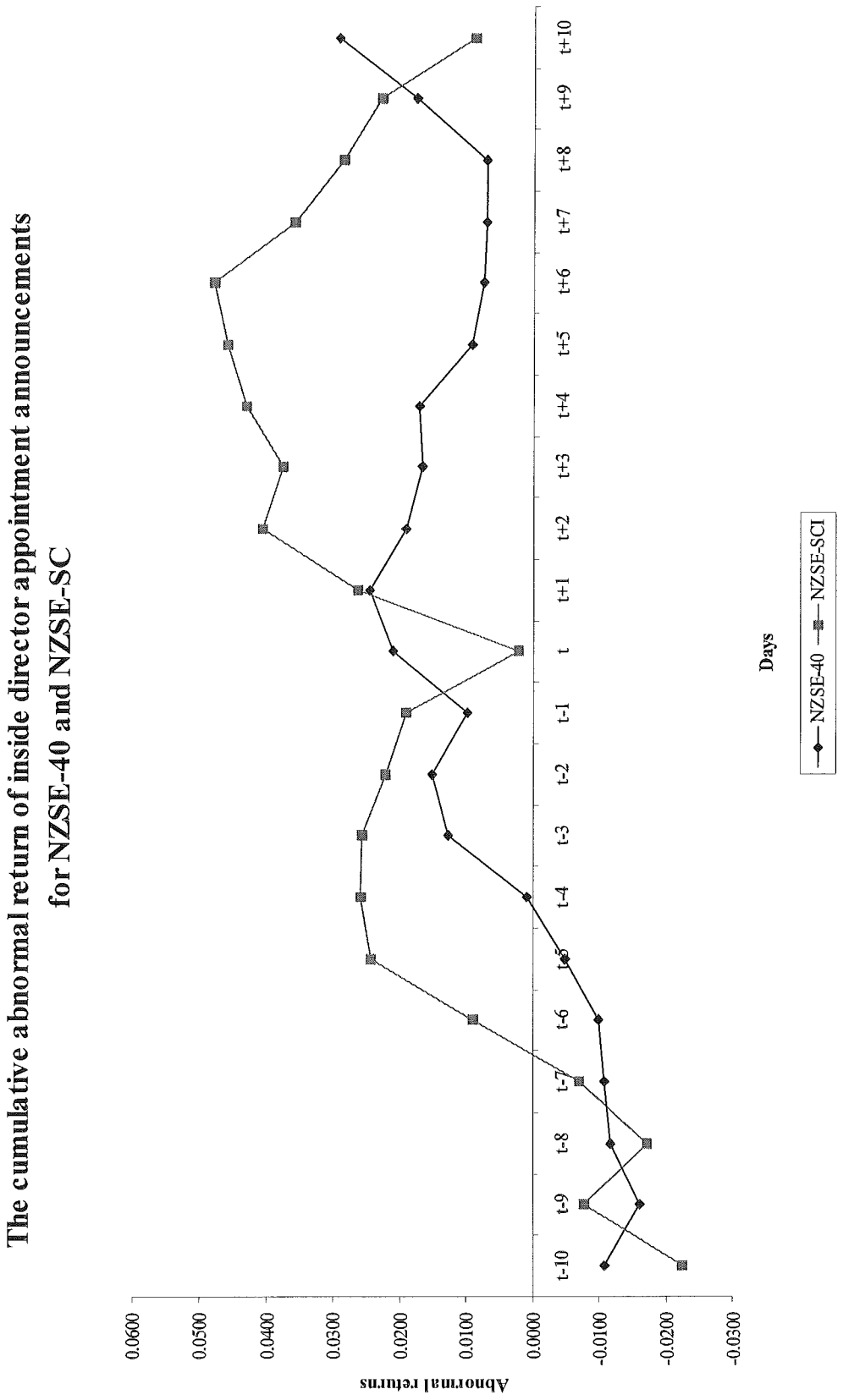

Figure 5.4 The cumulative abnormal returns of NZSE-40 and NZSE-SC companies following inside director appointment announcements.

5.6 All outside director appointment announcements of NZSE-40 and NZSE-SC companies

The samples of 57 NZSE-40 and 112 NZSE-SC outside director appointment announcements are analysed. The results are reported in Table 5.6. Panel A.1 shows the daily abnormal returns of NZSE-40 companies, while the daily abnormal returns of NZSE-SC are shown in Panel A.2. It is found that on the day the announcement is officially released to the market, the abnormal return experienced by the NZSE-40 companies shows an insignificant negative value of –0.28 per cent, with standard deviation of 0.0041 and a *t*-statistic of –0.6675. Fifty-one per cent of the firms in the sample report positive abnormal returns, while 49 per cent report negative abnormal returns. A further insignificant negative abnormal return of –0.11 per cent is also found on the day following the announcement day, with a *t*-statistic of –0.3307. This suggests that investors expect the future performance of NZSE-40 companies to decline following the appointment of outside directors. This could be because investors interpret outside director appointments as a policy instability, as the new director could influence existing firm policy.

In contrast with the insignificant abnormal returns found in large firms, the result in Panel A.2 shows that NZSE-SC companies report a positive and significant abnormal return of 2.00 per cent, with an associated standard deviation of 0.0121 and a *t*-statistic of 1.6498 on the announcement day. This group of companies report further statistically significant positive abnormal returns on the two days following the announcement. The values of the abnormal returns are 1.02 per cent and 0.65 per cent on day t+1 and t+2 respectively, with corresponding *t*-statistics of 1.3044 and 1.5377. These significant abnormal returns during the announcement period suggest that investors view the appointment of outside directors by small firms as a step towards improving the firm's performance.

Similar findings to the daily abnormal return are observed when two-day portfolios are examined. Panel B.1 shows an insignificant abnormal return of –0.38 per cent (with a *t*-statistic of –0.6935) during the announcement period for NZSE-40 companies, although 51 per cent of the firms in the sample shows positive abnormal

returns. However, it should be noted that abnormal returns of NZSE-40 companies are insignificantly positive during the two-day intervals immediately preceding and following the announcement period. During days t+2 to t+3, an insignificant positive abnormal return of 0.33 per cent is reported with an associated *t*- statistic of 0.9861. While the abnormal return of 0.38 per cent is observed during days t+4 to t+5, only 47 per cent of the firms in the sample experience positive returns during this period.

On the other hand, a significant positive abnormal return of 3.02 per cent is reported for NZSE-SC companies, with a standard deviation of 0.0192 and a *t*-statistic of 1.5752, as shown in Panel B.2. Their abnormal returns are positive but insignificant for the two-day intervals which precede the announcement period. During days t-4 to t-3, an insignificant positive abnormal return of 2.89 per cent is found, with a *t*-statistic of 0.9208. Similarly, an insignificant positive abnormal return of 0.27 per cent is also observed during days t-2 to t-1. During this period, 54 per cent of firms in the sample experience positive abnormal returns, while 46 per cent of firms report negative abnormal returns. Although the periods leading to and including the announcement period show positive abnormal returns, the abnormal return during the period immediately following the announcement is found to be insignificantly negative at –1.23 per cent, with a *t*-statistic of –0.5334. Fifty-one per cent of the firms report positive abnormal returns on the same day. The result of this positive and significant abnormal return during the announcement period following the small companies' appointment of outside directors shows that investors anticipate an improvement in the firm's performance influenced by the new directors.

Figure 5.5 shows the graph of 21-day cumulative abnormal returns for NZSE-40 and NZSE-SC companies. It shows that while the NZSE-SC shows an increase in value on the announcement day and thereafter, the abnormal returns of NZSE-40 companies move around zero during the same period. Also, while small companies experience an increase in abnormal return on the announcement day, the large firms report a slightly declining abnormal return. Clearly, small companies have outperformed their large counterparts during the announcement and post-announcement periods.

These results show that investors view the appointment of outside directors by small firms to have a positive impact on the firm's future performance, while they are

indifferent toward large New Zealand companies' future performance. The findings observed in this study are consistent with those found by Rosenstein and Wyatt (1990), Reingnum (1985) and Rediker and Seth (1995). They suggest that outside director appointment announcements are regarded as a positive move toward a better future performance in small companies. Rosentein and Wyatt (1990) further suggest that the reason small firms show larger abnormal returns around the announcement period is because outsiders may be considered an efficient source of technical expertise or environmental information. The benefits associated with the addition of a well-known or influential public figure to the board may be more valuable for smaller companies, or the publicity associated with these announcements may be more important for firms that are infrequently in the news. Apart from that, additional monitoring associated with appointments of outsiders may also be less important for larger firms, which are more closely followed by investment analysts (Moyer *et al.*, 1989)

Table 5.6 Abnormal returns of NZSE-40 and NZSE-SC companies following outside director appointment announcements.

Day	A.1 Daily mean abnormal returns of NZSE-40					A.2 Daily mean abnormal returns of NZSE-SC				
	AR	SD	t-stat	Prop :+ve	Prop :-ve	AR	SD	t-stat	Prop :+ve	Prop :-ve
t-10	**-0.0006**	0.0036	-0.1545	56	44	**-0.0001**	0.0031	-0.0260	44	56
t-9	**0.0014**	0.0026	0.5628	61	39	**-0.0074**	0.0097	-0.7696	43	57
t-8	**0.0011**	0.0026	0.4117	49	51	**-0.0071**	0.0130	-0.5491	45	55
t-7	**-0.0005**	0.0026	-0.1810	54	46	**0.0223***	0.0156	1.4261	48	52
t-6	**-0.0002**	0.0023	-0.0901	51	49	**-0.0454**	0.0555	-0.8180	46	54
t-5	**0.0003**	0.0021	0.1616	51	49	**0.0292**	0.0249	1.1692	51	49
t-4	**0.0016**	0.0024	0.6799	56	44	**0.0155**	0.0138	1.1208	46	54
t-3	**-0.0030**	0.0029	-1.0476	47	53	**0.0134**	0.0180	0.7445	43	57
t-2	**-0.0029***	0.0020	-1.4395	46	54	**0.0196***	0.0141	1.3832	53	47
t-1	**0.0040**	0.0031	1.2949	53	47	**-0.0168**	0.0185	-0.9126	47	53
t	**-0.0028**	0.0041	-0.6675	51	49	**0.0200***	0.0121	1.6498	46	54
t+1	**-0.0011**	0.0033	-0.3307	51	49	**0.0102***	0.0078	1.3044	54	46
t+2	**0.0019**	0.0025	0.7532	47	53	**0.0065***	0.0042	1.5377	50	50
t+3	**0.0014**	0.0020	0.6967	56	44	**-0.0188**	0.0234	-0.8025	46	54
t+4	**0.0010**	0.0019	0.4923	53	47	**-0.0009**	0.0039	-0.2382	42	58
t+5	**0.0021**	0.0029	0.7168	56	44	**0.0009**	0.0041	0.2247	49	51
t+6	**0.0037***	0.0023	1.6262	58	42	**0.0210**	0.0222	0.9450	46	54
t+7	**0.0000**	0.0028	-0.0095	47	53	**-0.0003**	0.0093	-0.0327	47	53
t+8	**-0.0004**	0.0024	-0.1588	53	47	**-0.0099**	0.0141	-0.7033	46	54
t+9	**-0.0039***	0.0024	-1.6449	42	58	**-0.0103**	0.0140	-0.7375	38	63
t+10	**-0.0002**	0.0022	-0.1100	51	49	**0.0047**	0.0080	0.5841	46	54

Period	B.1 The two-day cumulative AR portfolio of NZSE-40					B.2 The two-day cumulative AR portfolio of NZSE-SC				
	AR	SD	t-stat	Prop +ve	Prop -ve	AR	SD	t-stat	Prop +ve	Prop -ve
t-10 to t-9	**0.0009**	0.0038	0.2290	56	44	**-0.0075**	0.0107	-0.7025	46	54
t-8 to t-7	**0.0006**	0.0038	0.1560	46	54	**0.0151****	0.0069	2.2024	48	52
t-6 to t-5	**0.0001**	0.0031	0.0422	47	53	**-0.0163**	0.0313	-0.5199	52	48
t-4 to t-3	**-0.0014**	0.0029	-0.4695	47	53	**0.0289**	0.0313	0.9208	45	55
t-2 to t-1	**0.0011**	0.0038	0.2833	46	54	**0.0027**	0.0075	0.3595	54	46
t to t+1	**-0.0038**	0.0055	-0.6935	51	49	**0.0302***	0.0192	1.5752	52	48
t+2 to t+3	**0.0033**	0.0033	0.9861	51	49	**-0.0123**	0.0231	-0.5334	51	49
t+4 to t+5	**0.0030**	0.0038	0.8013	47	53	**0.0000**	0.0057	-0.0007	42	58
t+6 to t+7	**0.0037**	0.0037	0.9849	54	46	**0.0207**	0.0164	1.2566	44	56
t+8 to t+9	**-0.0043***	0.0029	-1.4499	42	58	**-0.0203**	0.0273	-0.7427	48	52

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

Panel A shows daily mean abnormal returns of a 21-day test period after performing the event study with a 200-day estimation period of 57 NZSE-40 and 112 NZSE-SC outside director appointment announcements from 1993-1999 for which NZSE announcement dates and the share price data are available. Panel B presents the cumulative 2-day mean abnormal return and defines the announcement period as the day the announcement is made (day t) and the day following the announcement day (day t-1).

Day is days before and after the announcement is made, with day t representing the announcement day. AR is abnormal return, *t*-stat is *t*-statistic, SD is standard deviation, Prop +ve is proportion of AR positive, and Prop –ve is proportion of AR negative.

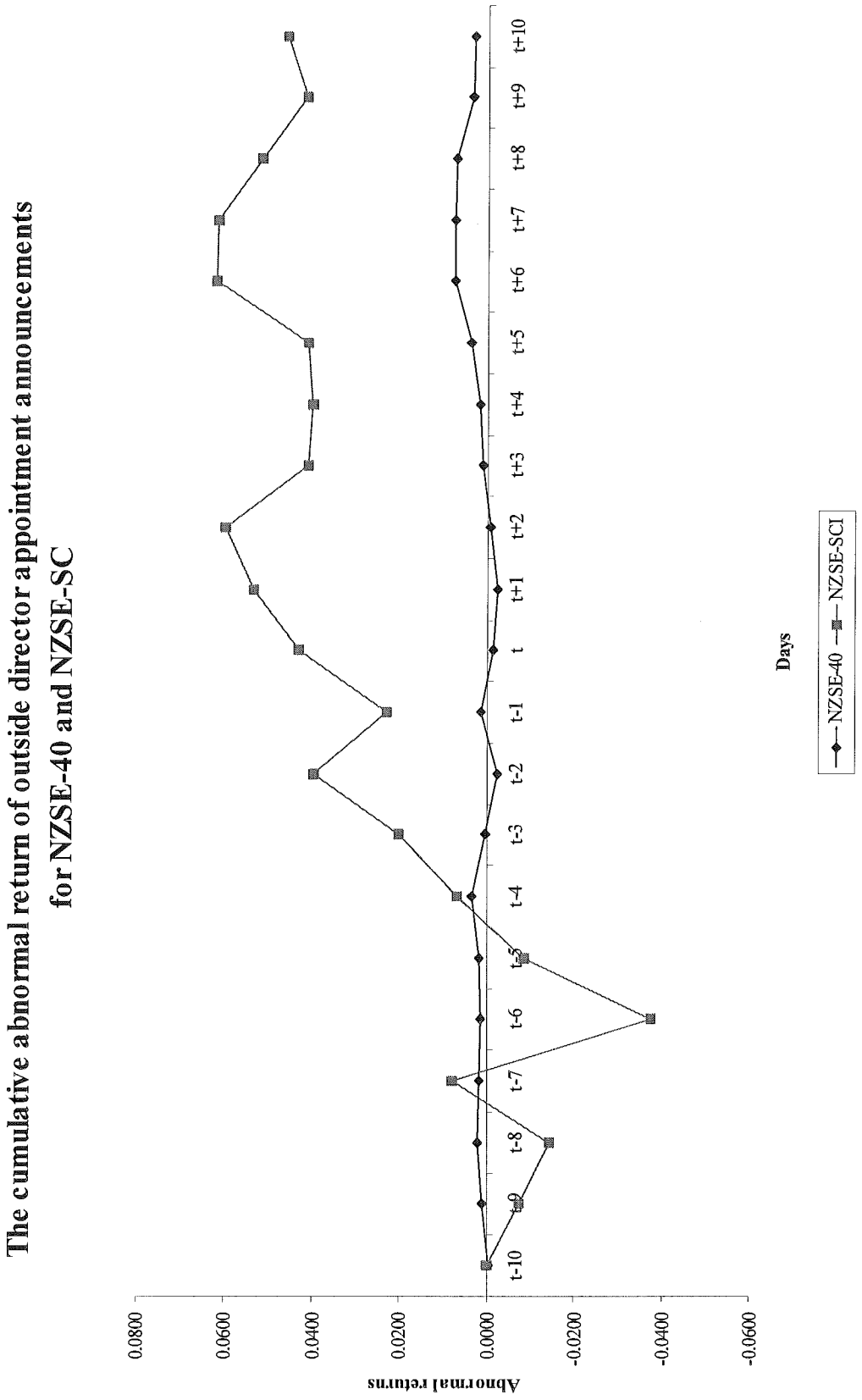

Figure 5.5 The abnormal returns of NZSE-40 and NZSE-SC companies following inside appointment of director announcements.

5.7 Summary

The influence of firm size on the market's response to changes of director announcements is summarised in Table 5.7. It shows that investors view inside director appointments in large firms as favourable indicators of future performance improvement. In contrast, when the same news is released by small companies, no major changes are expected. However, this study also finds a positive and significant abnormal return when outside directors are appointed in small companies, implying that investors expect the performance of small companies to improve as a consequence. However, such an event does not seem to alter the expectations of investors in large companies.

Table 5.7 The summary table of the event study result performed on the announcement of top management change announcements in NZSE-40 and NZSE-SC companies.

Type of announcement	NZSE-40		NZSE-SC	
	Announcement period abnormal returns	Statistical significant	Announcement period abnormal returns	Statistical significant
All announcements	-0.0192	Insignificant	0.0197	Significant at 5% level
All director appointments	-0.0015	Insignificant	0.0282	Significant at 5% level
Inside director appointments	0.0149	Significant at 5% level	0.0072	Insignificant
Outside director appointments	-0.0038	Insignificant	0.0302	Significant of 5% level

6 The Influence o f Top Management Changes on Long-term Firm Performance

6.1 Introduction

Top management changes are believed to be the result of declining firm performance. Therefore, it is common sense to expect a firm's performance to improve after top management is replaced. The objective of this chapter is to investigate whether the financial performance of New Zealand companies is affected by changes in top management. However, as our event study findings indicated that only the changes of directors in New Zealand boards generate statistically significant abnormal returns, I limit the analysis of a firm's performance to that sub-sample. Furthermore, the time constraint prevented examination of the same issue for other sub-samples which generated statistically insignificant abnormal returns during the announcement period. Also because of the time constraint, this study chose to limit the sample to 40 NZSE-40 companies and 40 randomly selected NZSE-SC companies. In addition, as presented in Table 6.1, only a small number of inside director appointment announcements were found. For this reason the analysis of the effect of such events on firm performance is omitted in this study.

Table 6.1 The stratification of the firm performance analysis sample.

Type of announcements	NZSE-40	NZSE-SC	Total
All announcements of top management changes	170 (59%)	119 (41%)	289
All director announcements	127 (58%)	91 (42%)	218
All director appointment announcements	65 (57%)	49 (43%)	114
Inside directors appointment announcements	8 (53%)	7 (47%)	15
Outside director appointment announcements	57 (58%)	42 (42%)	99

After the sample of NZSE-40 and the randomly selected 40 NZSE-SC companies are determined, the sample is categorised into sub-samples of announcements. Table 6.1 shows that when the number of announcements is compared between NZSE-40 and NZSE-SC companies, the large companies made more announcements. In all announcements of top management changes, NZSE-40 companies made approximately 59 per cent, whereas the small companies released 41 per cent of the announcements. Furthermore, a similar proportion of announcements is found to be made by NZSE-40 when all director announcements are considered. Over the seven-year period, the NZSE-40 made approximately 58 per cent of the total director announcements, while small companies made up the balance. As mentioned earlier, this study focuses on the appointment of directors and, therefore other types of director announcements are excluded from the sample. However, this study found a large sample of outside appointments of director changes, with the majority of the announcements (58 per cent) made by the NZSE-40. Table 6.1 shows that the majority of the announcements in the sample are released by the NZSE-40.

The abnormal performance for three years from year t-1 to t+1 are analysed, where year t is the year the firms release the announcement to the market. The ordinary least square regressions (OLS) were estimated using firm performance variables as dependent variables and the director appointment indicator variable as the independent variable. Additional dummy variables were used to capture the calendar-year related impacts. Both market-based information and financial statement information are used to generate the following performance variables: (1) share returns, (2) sales growth, (3) change in pre-tax income/assets, (4) quick ratio, (5) debt ratio, and (6) interest coverage ratio. Abnormal performance is estimated as the coefficient on the appointment dummy variable. The abnormal performance estimate for year t, therefore, measures the average difference in performance between firms that made the relevant director appointment in year 0 and firms that did not. Because the regressions include calendar-year dummy variables, abnormal performance is relative to the average performance of all firms in a given calendar year.

When the change in top management occurs, if the investors expect the firm's future performance to improve, the share returns should increase. Other indicators which show that the firm's performance is superior are an increased sale growth, which

reveals a higher revenue gain by the firm, and an increase in change in pre-tax income/ assets, which shows the earning power of the firm's assets. Apart from that, a positive quick ratio and a high interest coverage ratio also signal better firm performance. Nevertheless, the sound firm should also maintain a low debt ratio to minimise the risk of bankruptcy.

This chapter is presented as follows: in section 6.2, the results of the regression of the change in top management in general is reported. Then the findings of the firm performance when NZSE-40 and NZSE-SC companies release all director announcements are analysed in section 6.3. This is followed, in subsections 6.4 and 6.5 respectively, by the results of firm performance when the all director appointments and outside director appointment announcements are analysed. Finally, the summary of the findings is presented in section 6.6.

6.2 All announcements of change in top management

Overall, top management change has no significant effect on the performance of the selected firms as shown in Table 6.2. An abnormal performance of 0.124 is found for the share return in year t, while a value of 0.1004 is observed on the year following the announcement. Sales growth shows a negative value of -2.9253 in year t. However, during the post-announcement year, a positive abnormal performance of 1.8776 is found for this variable. Apart from that, change in pre-tax income/assets shows a slightly higher negative abnormal performance of -0.5200 in the announcement year. This eases up to -0.3972 in the following year. When quick ratio is considered, an increasing positive trend is found with the value of 1.5572 and 1.9442 in years t and t+1 respectively. The debt ratio shows a negative value of -0.0440 in the year of the announcement. The results observed from interest coverage ratio show a negative value of -302.4901 in year t, with an abnormal performance of -126.7800 the following year.

Regardless of firm size, the findings of the analysis of the effects of all announcements on the firm performance shows that investors generally view a change in top management as favourable news. Although the results show no significant

changes in the firm performance, the improvement is observed in the slightly higher value of the share return in year t. A similar positive indication of the improvement of the firm is also found in the increase in abnormal sales growth after announcements of changes in top management have been made. The companies also make a moderate gain in earning power from -0.4800 to -0.3972, from the year before to the year following the changes. The firms also make an improvement in their quick ratio, which shows a higher ability to pay off short-term debts. However, the trend of debt ratio lends no support to improvement in firm performance, showing an increase in debt ratio over the three-year period. Nevertheless, changes in top management seem to improve the firms' ability to increase income to cover interest expenses.

The results found in this study are consistent with Eitzen and Yetman (1972) who examined the relationship between coaching change and the winning per centage of 129 college basketball teams and found no significant influence of the individual on the team's performance. This finding is also similar to Samuelson *at el.* (1985) who find that the change in the leadership position does not significantly affect revenues and rate of return. However, the finding of insignificant effect of changes in top management does not support the findings of Smith *et al.* (1984) who observed an increase in the organisation's growth following the change in leadership. In addition, this study is also inconsistent with the result found by Grusky (1963) who observed a decline in sport team's performance after the mid-season managerial change.

In addition to the analysis of all the firms as one group, different firm sizes are also considered. Panel B in Table 6.2 shows performance results of NZSE-40 companies when they make changes in top management teams. It is found that the share return during the announcement year is slightly higher, with a value of 0.2349, compared to the years before and after the announcement. However, this positive share return shows no significance. Sales growth during the year t-1, t and t+1 are negative, with a significant value of -0.1201 in year t-1. However, in year t, the sales growth of NZSE-40 shows an insignificant value of -0.1528. An insignificant abnormal sales growth of -0.1744 is also observed during the post-announcement period of year t+1. The change in pre-tax income/assets shows an insignificant abnormal performance of 0.0076 in year t, while the period following the announcement year reports an insignificant value of -0.0047. Quick ratio also shows an insignificant abnormal

performance during year t; however, it is negative with the value of -0.3264. Similarly, a negative performance of -0.0846 is also found in year t+1. Furthermore, it is reported that an insignificant positive abnormal performance of 0.0135 is observed for debt ratio, although in the following year, a slight negative value of -0.0322 is observed. Finally, Panel B of Table 6.2 also shows the result of abnormal performance of interest coverage ratio. A negative abnormal performance is found in year t+1 with a value of -320.4518, while a value of -703.1230 is found in year t.

Furthermore, the results of the effects of change in top management on the performance of NZSE-SCI companies are presented in Panel C of Table 6.2. Overall, no significant effects are observed in the firm performance as a result of these top management changes. Share returns report insignificant values of -0.0084 and 0.0053 in the year of the announcement and the following year respectively. An insignificant positive sales growth of 5.8282 is found during the announcement year. However, in year t-1, sales growth shows a slightly negative value of -4.5056. When change in pre-tax income/assets is considered, the abnormal performance has a higher negative value of -1.2177 in year t, with a lower negative value of -0.8885 in year t+1.

On the other hand, quick ratio of the small firms shows a positive trend over the years t-1, t and t+1, with the highest insignificant value of 5.2057 in year t. An insignificant negative abnormal performance of -0.131 is found in the same year for debt ratio. Apart from that, the small firms' interest coverage ratio also shows an insignificant value of -7.5134 in year t, and a value of -8.6187 in year t+1.

The result of a positive share return for large companies in this study is consistent with the expectation of the positive effect of top management changes on firm performance. However, although sales growth declines over the period of three years, the earning power of the firm's assets increases. It seems that large firms tend to increase long-term borrowing in order to improve firm performance. This is indicated by the worsening debt ratio during the post-announcement period, while interest coverage ratio and quick ratio recovered.

In the small companies, a positive share return trend around the announcement year shows that investors view the change in top management as good news. Similarly, the

abnormal performance of sales growth also supports this expectation. Although change in pre-tax income/assets moves against the expectation of improvement in performance, improvement in quick ratio and a decrease in debt ratio convey a positive view of firm performance. Overall, this shows that the changes in the top management of the small firms seem to improve their performance.

Although the results show a slight improvement in firm's performance, there is no sign of significant impact by the change in top management on either the large or small New Zealand firms during the announcement year. This insignificant effect is consistent with the study carried out by Eitzen and Yetman (1972) who observed a change in college basketball teams' performance. However, the result of this study does not support Lieberson and O'Conner (1972) who find that in large firms, the leadership has an effect on the company. Although no significant effects are observed during the announcement year in both small and large companies, it is found that the small firms' performance tends to show a higher effect than large firms. These findings are consistent with the suggestion made by Reingnum (1985) and Rediker and Seth (1995) who suggest that small firms may have less complex control structures than large firms. Therefore, the effect of a change in one management position would be more meaningful in a small firm rather than in a large firm. In addition, the result of these insignificant changes in firm performance could be an outcome of the constraints by other environmental factors.

Table 6.2 Abnormal performance around years of the change in top management in New Zealand companies.

Dependent variables	A. ALL COMPANIES			B. NZSE40			C. NZSESCI		
	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.
Share Return									
Year t-1	-0.0062	**0.1040**	0.2022	-0.0648	**0.2063**	0.3922	0.0365	**-0.0127**	0.0252
Year t	-0.0012	**0.1240**	0.1859	-0.0521	**0.2349**	0.3594	0.0297	**-0.0084**	0.0232
Year t+ 1	0.0028	**0.1004**	0.1799	-0.0363	**0.2030**	0.3415	0.0193	**0.0053**	0.0208
Sales Growth									
Year t-1	1.4809	**-3.5207**	3.7000	0.2618***	**-0.1201***	0.0634	2.0259	**-7.7075**	7.8959
Year t	2.7304	**-2.9253**	3.2632	0.2000	**-0.1528**	0.1159	-1.3587	**5.8282**	7.4844
Year t+ 1	-0.5792	**1.8776**	3.1247	0.3886***	**-0.1744**	0.1133	4.4818	**-4.5056**	7.1412
Change in pre-tax income / assets									
Year t-1	1.8319**	**-0.4800**	0.6530	0.0156	**-0.0163**	0.0115	3.5656**	**-0.6593**	1.3562
Year t	0.1322	**-0.5200**	0.6115	0.0068	**0.0076**	0.0105	0.1774	**-1.2177**	1.2475
Year t+ 1	0.0510	**-0.3972**	0.6338	0.0101	**-0.0047**	0.0114	0.0179	**-0.8885**	1.3219
Quick Ratio									
Year t-1	2.1999	**1.1920**	1.8858	1.2345**	**-0.5243**	0.4755	3.4906	**3.6977**	3.8408
Year t	06400	**1.9442**	1.7955	1.1895**	**-0.3264**	0.4478	0.3899	**5.2057**	3.6540
Year t+ 1	1.4994	**1.5572**	1.2686	1.0368***	**-0.0846**	0.1247	2.1976	**4.1275**	2.6217
Debt Ratio									
Year t-1	0.5609***	**-0.0896**	0.0916	0.4741***	**0.0129**	0.0533	0.6396***	**-0.2507**	0.1969
Year t	0.5330***	**-0.0440**	0.0984	0.5518***	**0.0135**	0.0808	0.5112**	**-0.1313**	0.1869
Year t+ 1	0.5928***	**-0.0182**	0.0516	0.6974***	**-0.0322**	0.0808	0.4919***	**-0.0315**	0.0675
Interest Coverage Ratio									
Year t-1	176.8718	**-321.5321**	300.8268	381.6339	**-764.9601**	641.6649	-1.2374	**0.0495**	5.2066
Year t	112.4137	**-302.4901**	305.4739	314.6103	**-703.1230**	604.0918	11.4928**	**-7.5134**	5.3754
Year t+ 1	84.0060	**-126.7800**	202.7114	202.8753	**-320.4518**	411.0830	12.3825**	**-8.6177**	5.6997

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

The dependent variables in the regressions are financial variable. The independent variables the change in top management. Con. is the constant found from regression. Coeff. is the coefficient from a regression, in this case also refer to as an abnormal performance. S.E. is a standard error from regression.

Abnormal firm share return, sales growth, change in pre-tax income/ assets, quick ratio, debt ratio and interest coverage ratio before and after top management changes for 40 NZSE-40 companies and 40 NZSE-SCI companies from 1992-1999. Sales are

annual change in sales. Change in pre-tax income to assets is the annual change in the ratio of pre-tax income to total assets. Quick ratio, debt ratio and interest coverage ratio are, respectively, the annual change in the ratio of quick ratio, debt ratio and interest coverage ratio.

Abnormal performance is the coefficient from a regression of performance against a dummy variable for the relevant top management announcements. The regressions include dummy variables for the calendar year, so performance is relative to average performance for all firms in a given year. Year t is the year of the appointment. Year t-1 is the year before the announcement. Year t+1 is the year after the announcement.

6.3 All director announcements

Table 6.3 Panel A. shows the results of the firm performance observed for all the companies in the sample when there is a director change. It is found that there is no significant abnormal performance during the announcement year for all of the variables. The abnormal share return in the announcement year is -0.2312, with a slightly positive abnormal return of 0.1087 found in the following year. Sales growth for all companies shows an insignificant negative abnormal performance of -0.1006 in year t. This is a slightly higher negative value compared to –0.0422 and –0.087 reported in the year before and the year after the announcement. Furthermore, the change in pre-tax income/assets also shows an insignificant negative trend over the two years (from the year before to the announcement year) with a sign of improvement in year t+1. On the announcement year and year before, the change in pre-tax income/assets shows abnormal values of -0.0030 and –0.0038 respectively. However, it has improved to 0.0043 in the year following the announcement. Although, debt ratio shows an insignificant positive value of 0.0066 in the announcement year, in year t+1, an insignificant negative abnormal value of -0.732 is found. Finally, the interest coverage ratio shows an insignificant positive mean abnormal value on the announcement year and on the year immediately following the announcement year with the values of 656.6849 and 363.1379 respectively.

The results observed for all the firms in the sample show that when the firm makes any types of director change, the companies tend to demonstrate slightly negative performance in the year of the announcement. However, the expectation improves in the following year. While sales growth recovers in the year t+1, the firm's earnings power also improves. In addition, the firm's ability to pay off its short-term debt obligations improves gradually. The firm's risk of bankruptcy is also reduced after the announcement year and the interest coverage ratio of the firm has also improved. Overall, the firms in the sample seem to show an improvement in firm performance immediately after the announcement year even though it cannot be recognised in statistical terms.

After considering all the sample of the companies regardless of the effect of the firm size, Panel B shows the results of the effect of the all director change on the 40 largest companies in New Zealand. Similar to the results observed when the entire sample is analysed, no significant effect is found on the chosen financial variables. In the year the announcement is made, a slightly negative abnormal return of -0.6022 is observed, whereas a slightly positive abnormal return of 0.1075 is found in year t+1. The large firms also report a slight decrease in sales growth in the year of the announcement having a coefficient value of –0.1820, but it has improved to –0.1649 in year t+1. Change in pre-tax income/asset shows an insignificant negative abnormal performance of -0.0016 in the year of the announcement, whereas in year t+1, a slightly positive abnormal value of 0.0057 is found. Quick ratio shows a negative trend throughout the three-year period observed, but a gradual improvement in liquidity can be observed towards the post announcement year. Furthermore, the debt ratio of the large companies shows a positive value of 0.0185 in the year of the announcement of change in director is made, while the negative abnormal performance of -0.1225 is experienced in the following year. In addition, insignificant negative abnormal interest coverage ratios are observed in the year of the announcement and the year after, with the values of -484.3162 and -184.5805 respectively.

The effect of change in directors on the performance of small companies are also analysed and the results are presented in Panel C. In the announcement year, an insignificant positive abnormal return of 0.2716 is found. Also, an insignificant positive abnormal return of 0.1115 is observed in the following year. On the other hand, the sale growth shows a significant abnormal value in the year before the announcement was made, whereas in the announcement year, an insignificant abnormal value of 0.0821 is found. The small firms report insignificant abnormal change in pre-tax income/assets in year t and year t+1, with the associated values of -0.0055 and 0.0027. These companies report a negative liquidity performance in the year before the announcement (-0.4798) but a positive performance is observed in both announcement year and the following year. Debt ratio shows an insignificant positive abnormal value of 0.0097 during the announcement year. However, in year t+1, an insignificant abnormal debt ratio of -0.0119 is found. Finally, unlike the result observed from other financial variables, the interest coverage ratio of the small

companies shows a significant abnormal effect on the year of the announcement and the year after with the corresponding values of 2413.3032 and 1173.2365.

It is found that when the large New Zealand companies announce the changes in directors, investors show a slightly negative view toward the future firm performance. This is signalled by the slightly negative share return in the announcement year. However, an improvement in the share return is reported in the following year. Sales growth also worsens in year t. It is also observed that the firms' earnings power and the ability to pay-off short-term debt and interest have gradually improved over the years. However, the risk of bankruptcy is slightly higher during the announcement year.

Unlike large companies, when small companies announce the director changes, the investors seem to have a positive expectation toward the future firm performance. This is reflected in the positive performance in share return in the announcement year. Furthermore, the small companies show positive sales growth throughout the three-year period, although its trend is decreasing. Unlike the large firms, the earning power of the firms' assets declines in the announcement year. However it improves in the following year. On the other hand, the ability to meet the short-term debt after director changes in small companies rises in the announcement year and the following year, whereas the risk of bankruptcy is slightly higher. Nevertheless, the change in directors in the small firms shows a highly significant improvement in the ability to pay the interest expenses.

Although the large and small firms show sign of improvement in the firm's performance around the announcement eyar or the year following the change in directors, no statistically significant impact from these changes are observed in this study. This finding is consistent with Eitzen and Yetman (1972) who found that a change in coach has no effect on college basketball team's performance. Samuelson *et al.* (1985) also find that a change in the leadership position does not significantly affect revenues and rate of return. However, the result of insignificant performance in financial variables found in this study is inconsistent with Kaplan and Minton (1994) who observed a deteriorating trend in firm's financial variables when at least one new director was appointed from the bank to Japanese companies. Nevertheless, as the

small firms show a more positive impact from the change in directors, the result in this study is also consistent with the findings by Reingnum (1985) and Rediker and Seth (1995) who suggest that the small firms are more affected from these changes compared to the larger firms.

Table 6.3 Abnormal performance around years of the all director changes in New Zealand companies.

Dependent variables	A. ALL COMPANIES			B. NZSE40			C. NZSESCI		
	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.
Share Return									
Year t-1	-0.0176	**0.1791**	0.2733	-0.0929	**0.2561**	0.4141	0.0235	**0.1284**	0.5308
Year t	0.1168	**-0.2312**	0.2741	0.3223	**-0.6022**	0.3764	0.0244	**0.2716**	0.4789
Year t+ 1	0.0206	**0.1087**	0.2664	0.0044	**0.1075**	0.3660	0.0370	**0.1115**	0.4563
6.3.1.1.1 Sales Growth									
Year t-1	0.2657***	**-0.0422**	0.0723	0.2477***	**-0.0901**	0.0655	0.1912	**0.2342*****	0.0814
Year t	0.2088**	**-0.1006**	0.0869	0.2143	**-0.1820**	0.1214	0.1187	**0.0821**	0.1412
Year t+ 1	0.3730***	**-0.0871**	0.0875	0.4199***	**-0.1649**	0.1179	0.3472	**0.0112**	0.1493
6.3.1.1.2 Change in pre-tax income / assets									
Year t-1	0.0092	**-0.0038**	0.0086	0.0140	**-0.0120**	0.0120	0.0068	**0.0087**	0.0150
Year t	0.0090	**-0.0030**	0.0088	0.0089	**-0.0016**	0.0118	0.0088	**-0.0055**	0.0142
Year t+ 1	0.0068	**0.0043**	0.0079	0.0064	**0.0057**	0.0107	0.0071	**0.0027**	0.0129
6.3.1.1.3 Quick Ratio									
Year t-1	1.1191***	**-0.4530**	0.3669	1.2194**	**-0.4923**	0.4926	1.0403*	**-0.4798**	0.6125
Year t	1.1057***	**-0.1924**	0.3475	1.2082**	**-0.3705**	0.4677	1.0458**	**0.0398**	0.5661
Year t+ 1	1.0982***	**-0.1315**	0.3408	1.1506**	**-0.3073**	0.4581	0.9743**	**0.1046**	0.5513
6.3.1.1.4 Debt Ratio									
Year t-1	0.4801***	**0.0004**	0.0423	0.5070***	**-0.0568**	0.0552	0.4727***	**0.0673**	0.0683
Year t	0.5506***	**0.0066**	0.0624	0.5446***	**0.0185**	0.0841	0.5536***	**-0.0097**	0.1016
Year t+ 1	0.5753***	**-0.0732**	0.0614	0.5922***	**-0.1225**	0.0824	0.5560***	**-0.0119**	0.0992
6.3.1.1.5 Interest Coverage Ratio									
Year t-1	259.3744	**-318.4684**	385.2236	306.8069	**-672.7603**	666.9633	163.1555	**21.6893**	561.2316
Year t	-170.7059	**656.6849**	452.7006	222.4811	**-484.3162**	631.7034	-318.4801	**2413.3032*****	735.8200
Year t+ 1	-32.3925	**363.1379**	305.7573	77.7944	**-184.5805**	413.5608	-86.4250	**1173.2365****	482.9402

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

The dependent variables in the regressions are financial variable. The independent variables the change in top management. Con. is the constant found from regression. Coeff. is the coefficient from a regression, in this case also refer to as an abnormal performance. S.E. is a standard error from regression.

Abnormal firm share return, sales growth, change in pre-tax income/ assets, quick ratio, debt ratio and interest coverage ratio before and after top management changes for 40 NZSE-40 companies and 40 NZSE-SCI companies from 1992-1999. Sales are

annual change in sales. Change in pre-tax income to assets is the annual change in the ratio of pre-tax income to total assets. Quick ratio, debt ratio and interest coverage ratio are, respectively, the annual change in the ratio of quick ratio, debt ratio and interest coverage ratio.

Abnormal performance is the coefficient from a regression of performance against a dummy variable for the relevant top management announcements. The regressions include dummy variables for the calendar year, so performance is relative to average performance for all firms in a given year. Year t is the year of the appointment. Year t-1 is the year before the announcement. Year t+1 is the year after the announcement.

6.4 All director appointment announcements

The results of the effects of director appointments on firm performance are presented in Table 6.4. When all the companies are analysed, it is observed that the appointments do not significantly effect any financial variable. The abnormal return of shares shows a positive value of 0.0272 during the year of the announcement; also, sales growth shows a positive abnormal value of 5.6387 in the same year. However, in year t+1, an insignificant negative sales growth of –2.6022 is observed. Change in pre-tax income/assets shows negative values of –0.5207 in year t, and -0.3125 in year t+1. The abnormal performance of quick asset ratio also reports an insignificant negative value of –0.3580 in the announcement year, with a value of 4.8101 in the following year. The debt ratio shows a positive abnormal performance of 0.0362 in the announcement year with a slightly less positive value of 0.0090 in the following year. In addition, an insignificant, but large, negative value of –257.832 is observed for the interest coverage ratio in year t.

The results show that investors have positive views on future firm performance, as the abnormal share returns are positive during the announcement year. Furthermore, firm performance also shows an improvement in sales growth, with its value changing from negative in the year before the announcement to positive in the announcement year. Although the firms show a slight decrease in asset earning power in year t, an improvement is shown in the following year. Ability to pay off the short-term debt reduces during the announcement year. However, it recovers in year t+1. A similar result is found for the risk of firm bankruptcy when the debt ratio is analysed. A higher risk is found during the announcement year, while it gradually reduces in the year after the announcement. In addition, the firm's ability to generate enough income to cover interest expenses is also worsen during the announcement year. Overall, it is found that, with the exception of sales growth, firm performance tends to decline in the announcement year and it seems to improve in the following year. However, it should be noted that no significant abnormal performance is found during the announcement year.

This result is consistent with Samuelson *et al.* (1985) who also find that a change in the leadership position does not significantly affect revenues and rate of return. However, it lends no support to Smith *et al.* (1984) who find that effective leadership is associated with improvement in church performance. Also, it is inconsistent with the findings of Grusky (1963) who, after observing the effect of management turnover on the per centage of games won by 16 professional sport teams, found that the appointment of managerial personnel decreased the team performance.

Furthermore, Panel B shows the effect of director appointment announcements on the firm performance in New Zealand large companies. No significant effect of the director appointments is observed on the financial variables in the year the announcements were made. An abnormal performance of 0.0387 is found on the share return. Sales growth shows a higher negative abnormal performance during year t with a value of -0.1692, compared to the years before and after the announcement year. Although there is no significant effect on the change in pre-tax income/assets present during the announcement year (0.0023), a positive, significant value of 0.0242 is found in the year t+1. On the other hand, quick ratio shows insignificant values of –0.1616 and –0.0758 in the years t and t+1 respectively. Although the large companies' debt ratio show a negative abnormal performance of -0.0349 in year t, the year preceding the announcement shows a positive, but insignificant, value of 0.1145. It is also observed that the interest coverage ratio in the year following the announcement shows a less negative value of -180.3845, compared to the value of -434.3342 in year t.

Panel C of Table 6.4 shows the results of the effect of director appointments on the performance of small firms in New Zealand. It shows that during the announcement year, the share return shows a positive but insignificant abnormal performance of 0.0149. A further improvement in share returns with the value of 0.0268 is observed in the following year. Sales growth shows a large positive abnormal performance of 10.5647 when the small firms appoint new directors to the board. However, in year t+1 a negative abnormal sales growth of –6.4554 is found. On the other hand, the abnormal change in pre-tax income/assets shows a high negative value of –1.300 in year t compared to the years before and after the announcement. Panel C also shows an insignificant abnormal performance in quick ratio of -1.3823 in year t, with a

slightly positive abnormal value of 1.3773 in year t+1. However, it is important to note that a significant positive abnormal performance of quick asset ratio of 13.0593 is found in year t-1. Furthermore, this study also found an insignificant negative abnormal debt ratio of -0.0593 in year t, with a positive value of 0.0045 in the following year. Although an insignificant abnormal interest coverage ratio of -5.8679 is found in year t, a significant negative abnormal performance of -11.8974 is observed in the following year.

Overall, the result shows that director appointments have no significant effect on firm performance, when firm size is considered. However, the positive trend of abnormal share returns during the three-year period shows that investors have a positive expectation of small firms' future performance, rather than larger firm (which report a negative trend over the three-year period). The results of this study also show that, while sales growth improved after the appointment of new directors in small companies, a slight decline in sales growth is found in large companies. In contrast, the appointment tends to have a positive effect on change in pre-tax income/assets in large firms, with a significant effect shown in the year following the change, while small firms earnings power worsens in the announcement year. However, it improves in year t+1. In addition, the result shows that in the year of the director change, the ability to meet the short-term debt obligation in small firms declines, although signs of recovery are observed in the following year. On the other hand, large firms gradually improve the ability to payoff short-term debt over the three-year period. Nevertheless, an improvement in the bankruptcy risk is found in the year following the change in both large and small companies. In contrast, directors appointments seem to significantly deteriorate the interest coverage ratio in small firms while an improvement is observed in large firms. It should be noted that the director appointment announcement sample used in this study is dominated by the outside director appointments.

The results observed in this study concerning the differences in the firm size are consistent with the findings of Lieberson and O' Conner (1972), who find that in large companies, the leadership has a more positive effect on performance than in small firms. However, it should be noted that, in this study, only an insignificant positive indication of firm performance improvement is found in the announcement year.

Therefore, the findings in this study are also consistent with Eitzen and Yetman (1972) and Samuelson *et al.* (1985), who find that a change in leadership has no significant effect on organisation's performance. However, it lends no support to Grusky (1963) and Allen *et al.* (1979) who conducted a study on sport teams and concluded that a change in management was associated with a decline in team performance.

Table 6.4 Abnormal performance around years of all director appointment announcements in New Zealand companies.

Dependent variables	A. ALL COMPANIES			B. NZSE40			C. NZSESCI		
	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.
Share Return									
Year t-1	0.0174	**0.1050**	0.2390	-0.0118	**0.2367**	0.4727	0.0318	**0.0096**	0.0295
Year t	0.0374	**0.0272**	0.0256	0.0468	**0.0387**	0.0423	0.0266	**0.0149**	0.0274
Year t+ 1	0.0341	**0.0331**	0.0248	0.0459	**0.0350**	0.0439	0.0213	**0.0268**	0.0243
Sales Growth									
Year t-1	0.4796	**-2.1118**	4.3559	0.2237***	**-0.1043**	0.0747	0.4077	**-2.7038**	9.3832
Year t	0.6130	**5.6387**	4.1136	0.1565	**-0.1692**	0.1384	-0.7032	**10.5647**	7.6695
Year t+ 1	2.1005	**-2.6022**	3.9984	0.3687***	**-0.1334**	0.1393	3.9913	**-6.4554**	8.3771
Change in pre-tax income / assets									
Year t-1	1.6930**	**-0.2509**	0.7794	0.0093	**-0.0060**	0.0125	0.0083	**-0.3725**	1.5990
Year t	0.0258	**-0.5207**	0.7374	0.0079	**0.0023**	0.0138	0.0237	**-1.3003**	1.5230
Year t+ 1	-0.0401	**-0.3125**	0.7680	0.0060	**0.0242***	0.0124	-0.1264	**-0.4925**	1.5591
Quick Ratio									
Year t-1	1.9125	**5.5461**	2.0187	1.0635*	**-0.4617**	0.5981	1.0826	**13.0593*****	4.4386
Year t	1.3040	**-0.3580**	2.1668	1.0750**	**-0.1616**	0.5482	1.5949	**-1.3823**	4.3924
Year t+ 1	1.9437	**4.8101**	1.5029	0.9994***	**-0.0758**	0.1420	2.9302	**1.3773**	3.1110
Debt Ratio									
Year t-1	0.5342***	**-0.0411**	0.1124	0.4821***	**-0.0114**	0.0631	**1.0112*****	**-0.2637**	0.2323
Year t	0.5147***	**0.0362**	0.1187	0.6887***	**-0.0349**	0.0967	**0.4882****	**-0.0593**	0.2235
Year t+ 1	0.6004***	**0.0090**	0.0635	0.5352***	**0.1145**	0.0980	**0.5171*****	**0.0045**	0.0813
Interest Coverage Ratio									
t-1	116.5540	**-215.9302**	357.2489	224.0679	**-444.0439**	680.0713	**-0.9182**	**-1.0578**	6.4814
t	54.6669	**-257.8327**	368.6422	87.1375	**-434.3342**	719.8382	**10.3122***	**-5.8679**	6.2643
t+1	54.0389	**-107.3411**	243.1823	96.4299	**-180.3845**	485.4647	**11.1291***	**-11.8974***	6.6726

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

The dependent variables in the regressions are financial variable. The independent variables the change in top management. Con. is the constant found from regression. Coeff. is the coefficient from a regression, in this case also refer to as an abnormal performance. S.E. is a standard error from regression.

Abnormal firm share return, sales growth, change in pre-tax income/assets, quick ratio, debt ratio and interest coverage ratio before and after top management changes for 40 NZSE-40 companies and 40 NZSE-SC companies from 1992-1999. Sales are annual change in sales. Change in pre-tax income to assets is the annual change in the ratio of pre-tax income to total assets. Quick ratio, debt ratio and interest coverage

ratio are, respectively, the annual change in the ratio of quick ratio, debt ratio and interest coverage ratio.

Abnormal performance is the coefficient from a regression of performance against a dummy variable for the relevant top management announcements. The regressions include dummy variables for the calendar year, so performance is relative to average performance for all firms in a given year. Year t is the year of the appointment. Year t-1 is the year before the announcement. Year t+1 is the year after the announcement.

6.5 Outside director appointment announcements

Table 6.5 shows the results of the ordinary least square regressions for the samples of outside director appointments. Panel A contains the result for all companies. It shows that companies which appoint outside directors experience an insignificant positive share return of 0.1615 in the year of the change. A further positive return of 0.0403 is also shown in year t+1. A positive but insignificant abnormal sales growth of 5.3926 is found in year t. However, in year t+1 a negative abnormal sales growth of -2.020 is reported by the firms. Furthermore, it is observed that in year t, the abnormal change in pre-tax income/assets reports a highest negative value of 0.4760, compared to the values in the years prior to and following the announcement. However, these values show no significant changes. Although the quick ratio shows a positive significant abnormal performance of 6.7078 in the year prior to the announcement, it shows an insignificant negative value of -0.2735 in year t. In addition, a positive coefficient value of 0.8012 is presented in the following year. Debt ratio shows a negative performance of –0.0940 in year t, and a positive performance of 0.0552 in year t+1. Finally, Panel A also shows that the abnormal interest coverage ratio is insignificantly negative at -275.0936 in the announcement year and reduces to –118.3933 in year t+1.

The results in this study show that, when the outside directors are appointed by firms in New Zealand, investors expect an improvement in firm performance. This is evidenced in positive share returns during the three-year period. However, although sales growth increases in the announcement year, the firm's assets' earning power and the ability to meet short and long-term debt seems to worsen. This results in an increase in bankruptcy in the year the announcement is made. However, it should be noted that firms' financial status improves in the following year.

Although the signs of the performance measures show a mixed outcome, none of the results are significant. Therefore, this finding is consistent with the results of Eitzen and Yetman (1972) and Samuelson *et al.* (1985), who observed change of leadership having an insignificant effect on the organisation. Furthermore, the insignificant result shown in this research is partly consistent with Murphy and Zimmerman (1993) who

find a decline in firm performance following the change of top management. They suggest that top management tend to write-off debts and assets after new management is appointed. However, the results in this study contrast with the findings of Grusky (1963), who found that the appointment of managerial personnel decreased the teams' performance.

After considering the effect of outside director appointments on the performance of all companies in the sample, Panel B and C show the results for large and small companies. No significant effect on the financial variables is found in the announcement year for large companies in Panel B. Insignificant positive abnormal share returns of 0.2155 and 0.0463 are found in year t and year t+1 respectively. However, sales growth shows a negative abnormal performance of -0.157 in the year of the announcement. Furthermore, this value declines to -1.3330 in the following year. While there are no significant abnormal changes in pre-tax income/assets (0.0835) in year t, a significant positive abnormal value of 0.0025 is found in year t+1. It is also observed that the announcement of an outside director appointment has an insignificant effect on the quick ratio of the large firms in year t, which shows a value of -0.2114, while an abnormal value of -0.0924 is found the following year. On the other hand, the debt ratio shows insignificant abnormal values of 0.1368 and 0.0255 in year t and year t+1 respectively. Panel B of Table 6.5 also shows that the abnormal interest coverage ratio shows coefficient values of -454.6728 and -186.8630 in year t and year t+1 respectively.

Panel C in Table 6.5 shows the results of the effect of outside director appointments on the financial variables of small firms. It shows that the changes have no significant effect in the year the announcements are made. Share returns show positive abnormal returns of 0.0046 and 0.0222 in the year of the announcement and the following year respectively. Although sales growth improves in the year of announcement (with an abnormal value of 10.0933), it drops to a negative value of –5.0583 in year t+1. The pre-tax income/assets show negative abnormal values of -1.1373 and -0.5087 in year t and year t+1 respectively. In addition, a significant abnormal quick ratio of 13.9049 is found in the year prior to the announcement year, while in the year of the announcement, an insignificant negative abnormal performance of –1.3330 is observed. Debt ratio shows a negative abnormal value of -0.0354 in year t, with a

value of 0.0170 in the following year. Finally, the abnormal interest coverage ratio shows an insignificant value of -5.7719 in year t, whereas in the year following the announcement a significant negative abnormal value of -11.3790 is found.

The findings in Panel B show a positive trend in share return, which indicates that the investors view appointments of outside directors as favourable events for the future of large firm performance. However, this finding contrasts with the declining sales growth in large companies during the three-year test period. Furthermore, when large firms appoint outside directors to their boards, the financial variables show that the earnings power of firms' assets increases, with a significant change in the year after the announcement. Although quick ratio shows negative value around the announcement year, the trend of quick ratio is positive, showing that the ability of these firms to meet short-term financial obligations is gradually improving. However, it is found that the risk of the firm facing the bankruptcy increases when outside directors are appointed. The ability of large firms to pay the interest expense gradually increases over the three-year period.

The results in Panel C of Table 6.5 show that investors predict that better firm performance will be achieved when outside appointments of directors are made by small firms. This belief is also supported by an increase in sales growth in the year the announcement is made. However, it is found that the earnings power of the firms' assets declines and the firms' ability to meet the obligation of the short-term debt worsens in the announcement year. However, it should be noted that these two variables improve in the following year. This table also shows that debt ratio shows a positive trend around these three years. This indicates an increase in long-term borrowing, which increases the risk of the firm's bankruptcy. Apart from that, the ability to generate income to cover the firms' interest expense is also declines and a significant impact of change is shown in the year following the announcement. Overall, although there is an indication of an increase in income, small firms tend to increase long-term borrowing or write off fixed assets when there is an appointment of an outside director.

The finding of insignificant abnormal performance for both large and small firms shows that the appointment of outside directors has no significant impact on firm

performance during the announcement year. However, large firms show signs of improvement in the year following the announcement, while the small firms' performance seems to decline (with an increase in borrowing). The result of insignificant impact on financial performance is consistent with Eitzen and Yetman (1972) and Samuelson *et al.* (1985), who found that a change in leadership has no significant effect on the performance of the organisation. However, it is in consistent with Allen *et al.* (1979) and Smith *et al.* (1984), who conclude that the organisation tends to improve its performance after a change in leadership. Although this study shows signs of improvement in large firms, the results are not statistically significant.

Table 6.5 Abnormal performance around years of all outside director appointment announcements in New Zealand companies

Dependent variables	A. ALL COMPANIES			B. NZSE40			C. NZSESCI		
	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.	Con.	**Coeff.**	S.E.
Share Return									
Year t-1	0.0267	**0.1091**	0.2232	-0.0079	**0.2583**	0.4847	0.0320	**-0.0036**	0.0318
Year t	0.0233	**0.1615**	0.2286	0.0246	**0.2155**	0.4742	0.0274	**0.0046**	0.0319
Year t+ 1	0.0333	**0.0403**	0.0256	0.0442	**0.0463**	0.0451	0.0216	**0.0222**	0.0276
Sales Growth									
Year t-1	0.4964	**-2.6372**	4.0779	0.2195***	**-0.0996**	0.0766	1.2610	**-4.1938**	8.4793
Year t	-0.5578	**5.3926**	4.0902	-0.1502	**-0.1572**	0.1429	-0.9165	**10.0933**	8.4685
Year t+ 1	1.9468	**-2.0970**	3.5971	1.5910	**-1.3330**	4.5388	3.6531	**-5.0583**	7.4006
Change in pre-tax income / assets									
Year t-1	1.6842**	**-0.2045**	0.7591	0.0093	**-0.0073**	0.0129	3.4412	**-0.3488**	1.5256
Year t	0.0146	**-0.4760**	0.7614	0.1243**	**0.0835**	0.3592	0.0108	**-1.1373**	1.5768
Year t+ 1	-0.0455	**-0.3245**	0.7969	0.0068	**0.0025***	0.0129	-0.1330	**-0.5087**	1.5926
Quick Ratio									
Year t-1	1.8590	**6.7078*****	2.2847	1.0479*	**-0.4391**	0.5881	1.6269	**13.9049*****	4.5564
Year t	1.2907	**-0.2735**	2.2369	1.0772**	**-0.2114**	0.5627	1.5910	**-1.3330**	4.5388
Year t+ 1	1.9217	**0.8012**	1.5867	1.0128***	**-0.0924**	0.1462	2.9493	**1.7354**	3.2169
Debt Ratio									
Year t-1	0.5397***	**-0.0940**	0.1132	0.4811***	**-0.0062**	0.0681	0.5949***	**-0.1627**	0.2227
Year t	0.5132***	**0.0552**	0.1225	0.5353***	**0.1368**	0.1005	0.4863**	**-0.0354**	0.2311
Year t+ 1	0.5857***	**0.0115**	0.0639	0.6801***	**0.0255**	0.1043	0.4838***	**0.0170**	0.0811
Interest Coverage Ratio									
Year t-1	97.6365	**-230.1226**	382.7833	188.1329	**-480.7781**	720.4983	-0.8592	**-1.4261**	5.5647
Year t	44.0487	**-275.0936**	388.7777	78.3838	**-454.6728**	761.9790	10.3042*	**-5.7719**	6.1253
Year t+ 1	54.4910	**-118.3933**	254.4752	92.5355	**-186.8630**	506.0261	13.2474**	**-11.3790***	6.3697

Note: $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

The dependent variables in the regressions are financial variable. The independent variables the change in top management. Con. is the constant found from regression. Coeff. is the coefficient from a regression, in this case also refer to as an abnormal performance. S.E. is a standard error from regression.

Abnormal firm share return, sales growth, change in pre-tax income/ assets, quick ratio, debt ratio and interest coverage ratio before and after top management changes for 40 NZSE-40 companies and 40 NZSE-SC companies from 1992-1999. Sales are annual change in sales. Change in pre-tax income to assets is the annual change in the ratio of pre-tax income to total assets. Quick ratio, debt ratio and interest coverage ratio are, respectively, the annual change in the ratio of quick ratio, debt ratio and interest coverage ratio.

Abnormal performance is the coefficient from a regression of performance against a dummy variable for the relevant top management announcements. The regressions include dummy variables for the calendar year, so performance is relative to average performance for all firms in a given year. Year t is the year of the appointment. Year t-1 is the year before the announcement. Year t+1 is the year after the announcement.

6.6 Summary

After the analysis of the effects of changes in top management (especially directors of the boards) on firm performance, results support, on average, the argument that firm performance improves subsequent to change in top management. However, the abnormal improvement observed in financial variables was not significant in statistical terms. When there is a change in top management, small companies show a better performance improvement compared to large companies. Further, the findings of this study are in agreement with Reingnum's (1985) proposition that changes in top management tend to have a greater effect on small companies than large companies. As Pfeffer (1977) suggests, one reason for such findings is that leadership effectiveness could be limited in large and complex organisations by social and environmental constraints. In addition, Thomas (1988) proposed that leaders of large organisations have little impact on organisational performance because they are constrained by other factors, such as environmental factors.

7 Conclusion and Suggestion for Future Research

As the agency problem occurs as a result of separation of ownership and control in the organisation, corporate governance has been introduced as a tool to overcome this problem. This study focused on the board of directors as it is used as a mechanism to monitor and align the conflict of interest between the shareholders and the managers of the firms. The majority of the prior studies in this area have been carried out in the USA, Europe and Japan. None has been conducted in New Zealand. This study is one of the first analyses on this topic using New Zealand data.

A sample of 449 top management change announcements made by New Zealand listed companies during 1993-1999 was examined in the study. It focuses on both short-term market response and the long-term financial performance associated with these changes. The short-term effect is examined employing event study methodology while the ordinary least square regressions are used to assess the long-term firm performance.

Consistent with Mahajan and Lummer (1993), insignificant abnormal return of 0.45 per cent was found when the firms change CEOs and MDs. When this sample was sub-divided, it was found that the sub samples of appointments and resignations generated positive abnormal returns with the latter sample outperforming the former one. The corresponding abnormal returns for the two groups were 0.99 per cent and 1.88 per cent respectively. These results are in agreement with those reported in Betty and Zajac (1987) but contrast with Lubatkin *et al.* (1989). The third sub-sample which included resignation of CEOs and MDs reports a negative abnormal return of –1.13 per cent. This finding corroborates the finding of Weisbach's (1988) US study. However, all these abnormal returns are statistically insignificant.

The market response to announcement in changes in chairpersons is negative. The announcement period's means abnormal return is –1.34 per cent, but this is insignificant. This is inconsistent with the UK study conduct by Dahya (1993). Similar insignificant negative abnormal returns were found when the firms announce the appointments and resignations of chairperson. The corresponding abnormal returns are -2.34 per cent and -1.23 per cent respectively. These results for the announcement of change in chairpersons are consistent with the findings of Reingnum (1985). However, as expected, when the retirement of chairperson announcements are examined, an insignificant negative abnormal return of 2.03 per cent is found.

Although the insignificant abnormal return of 0.54 per cent was found when all director change announcement are analysed, a significant positive abnormal return of 1.79 per cent was observed when only director appointments were considered. The finding of significant abnormal returns is consistent with Rosenstein and Wyatt (1993). In addition, regardless of top management position, insignificant abnormal returns are found when the firms announce retirement of top management. This suggests that the investors seem to anticipate the event of retirement announcements.

After examining all the announcements as one group, the firm size effect is considered. The sample was divided into two groups; (1) the announcements made by NZSE-40 companies and (2) the announcement made by NZSE-SC companies. Only the announcements of changes in directors were analysed in this respect as the previous analyses indicated that the changes in this group were more important to investors. When all the director appointment announcements were considered, the small firms show a significant positive abnormal return of 2.82 per cent, while an insignificant negative abnormal return of -0.15 per cent is observed for the large firms. However, it seems that the investors favoured the inside director appointment announcement in large firms, while they prefer the outside director appointment announcement made by small firms. The investors seem to favour the insider appointment of director to the large companies, rather than the outside director appointment. This could be that the inside appointment shows a stability of the firm's policy, which is expected in the larger firms as they have a more complex structure. In contrast, when the outside directors are appointed to the small firms the investors

expected the benefit gained from the new directors' experience which will be an advantage toward the firm's performance.

In addition to the event study analysis, the ordinary least square regressions were performed using changes in top management and the financial variables to determine the long-term effect of the change. This study limited the sample for this firm performance analysis to NZSE-40 and 40 randomly selected NZSE-SC companies. Overall, it is observed that when the firms generally change the top management, the profitability ratio declines in the announcement year, while it improves in the following year. On the other hand the liquidity and leverage ratios show improvement in the announcement year and the following year. However, when the firm size is considered mixed results are found. The performance of NZSE-40 companies decline in the announcement year, while the liquidity and leverage ratios recover in the following year. The profitability indicator still shows a negative coefficient. On the other hand, the NZSE-SC companies' profitability and liquidity ratios show an improvement, while the leverage ratio of these firms worsen after the change.

Furthermore, when all the director announcements are considered, it is observed that the investors show a slightly negative view toward the future firm performance. This is consistent with the unfavourable abnormal performance observed with respect to the profitability and liquidity ratios of the firm. However, the sign of improvement is present in the following year. In addition, when the firm size is considered, the large firms show a decline in firm performance during the announcement year, while the small firms' performance shows an improvement. However, it should be noted that the performance of the large firms seems to improve in the following year.

The result of the firm performance when there is an appointment of director shows that the profitability of the firm shows a positive sign in the announcement year, whereas the liquidity and leverage ratios decline in the same year. However, all the ratios improve in the year after the announcement. On the other hand, when NZSE-40 is analysed, the result shows a decline in profitability and liquidity ratios in the announcement year, while there is an improvement in leverage ratio. However, in the following year, the firm seems to slightly improve their profitability and liquidity ratios. Although the large firms show an unfavourable profitability ratio in the

announcement year, the small firms show an improvement. However, it is found that the liquidity and leverage ratios of the small firms decline in the announcement year. Furthermore, while the liquidity of the small firm recovered in the following year, the profitability and the leverage ratios seem to be worsen.

When the effect of outside director appointments on the firm performance is analysed, an improvement in profitability ratio of the firm is found in the announcement year, while declines in liquidity and leverage ratios of the companies are observed. Apart from that, when the sub-samples of different firm sizes are considered, it is found that the large firms continue to experience a decline in their performance in the following year. Although the liquidity and leverage ratios also decline in the announcement year, the sign of improvement is observed in the following year. In contrast, the small companies' profitability shows a positive sign in the announcement year. However, it declines in the following year. The liquidity of the small companies seems to be worsening in the year of outside director appointment, while the leverage ratio shows a favourable sign of improvement in the announcement year. However, it should be noted that, in the year after the announcement, the liquidity of the small firm improves, while the leverage ratio worsens.

Overall the results suggest that the investors seem to expect an improvement of performance in small companies when they made a change in directors. These companies experience financial difficulties in the year before the announcement and in the year of the announcement but improves it in the year following the change. However, such an improvement was not observed with respect to large companies.

This study did a comprehensive analysis on market response to the announcement of changes in top management using divergent sub-samples of management changes. The differential market responses to different events indicate what changes are perceived by New Zealand investors as important changes that will have a significant impact on firm performance. The findings of this study will help company executives in their decisions to change managerial personnel of the company.

The limitation of this study is that it concentrated on appointment of directors when it analysed the impact of these changes on long-term financial performance. The

limitation is totally attributable to the time constraint faced by the researcher. Further research will benefit by analysing the firm performance for a longer time horizon using all the categories of changes used in the event study section of this study. A further aspect that can be explored in this small market is insider behaviour (for example, trading) around the announcement of changes in top management which have been found to generate statistically significant abnormal returns to shareholders in this study.

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Appendix 2.1 Effect of top mangers change on market response

Author(s), year, country	Period	Sample	AR	*t*-stat	Results
Bendeck and Waller 1999 USA	1975-1994	28 investment banks - All sample - non-senior management - senior management	-0.41 -0.65 0.07	-2.32* -3.33** 0.18	▪ Negative excess returns for firms that lost non-senior manager, while no average stock price reaction are detected for firms that lose senior managers. ▪ The departures of non-senior managers are associated with decreases in shareholder wealth. ▪ The results are also consistent with the hypothesis that the real effect from management changes confounds the information effect for senior management departures.
Betty and	1979-	209			▪ No significant abnormal

Zajac 1987 USA	1980	announcements of new appointments - 184 insiders - 25 outsiders	0.000 0.001	0.071 0.761	returns for the period prior to the announcement. ▪ Significant negative change in share returns during the post-announcement period of inside appointment. ▪ The announcement outsider successions are not significant.
Bonnier and Bruner 1989 USA	1969-1983	70 firms 87 management changes (CEO, President and Chairman)	2.48*	4.39	▪ Excess returns are significant and positive after the poor firm performance. ▪ CEO has a largest positive and significant return.
Borakhovich, Parrino and Trapani 1996 USA	1970-1988	618 CEO turnovers Voluntary Succession - inside appointment - outside appointment Forced Succession - inside appointment - outside appointment	 0.21* 0.67* -0.85** 1.64**	 2.07 2.48 -3.08 3.37	▪ The investors view the appointment of outsider more favourably than the insider. ▪ A significant positive abnormal return is observed, when a CEO is replaced by an outsider following either voluntary or forced announcement. ▪ Large negative abnormal return is found when insiders replaced the fired

					CEOs. ▪ A small positive abnormal return is found when inside appointments follows the voluntary successions.
Denis and Denis 1995 USA	1985-1988	1689 firms All management change - all change - forced resignation - normal retirement Top Executive - all change - forced resignation - normal retirement Non-top management - all change - forced resignation - normal retirement	 0.09 1.50 0.16 0.63 2.50 0.61 -0.24 -0.64 0.27	 0.62 2.26 0.45 2.18 2.88 1.62 -1.43 -0.76 -0.44	▪ Announcements of management changes are associated with abnormal returns that are significantly positive for force resignations. ▪ Insignificant abnormal return for normal retirement
Furtado and Rozeff 1987 USA	1975-1982	323 appointments -220 inside appointments -103 outside appointments	1.05 0.72 1.03	2.69** 0.99 2.18**	▪ The capital market is more favourable with internal promotion.

		-62 dismissals	3.17	3.56**	
Lubatkin, Chung, Rogers, Owners 1989 USA	1971-1985	Total sample 477 appointment of CEOs	0.07 0.11		▪ Overall, investors are not indifferent about changes in leadership. ▪ Outside appointments have positive and significant effects on investors' expectations.
Mahajan and Lummer 1993 USA	1972-1983	498 management changes (subgroup into 218 loss of power, 180 reshuffle and 100 mandatory retirement)	-0.02 0.24** -0.50	-0.08 1.26 -2.16	▪ No effect of management turnover on shareholder's wealth. ▪ The market reacted negatively to the board change.
Reingnum 1985 USA	1978-1979	1236 changes of CEO unpaired 218 paired	0.06 0.13		▪ Significant positive succession effect is found for outside appointment in small firms where the departure of the former office-holder was announced along with the appointment of the new appointment.
Rosenstein and Wyatt 1989 USA	1981-1985	1251 outside director announcements - Total sample - Non-contaminated	0.13 0.22	2.17* 2.38*	▪ Outside appointment are resulted in positive significant share price.

		sample - Contaminated sample	0.04	0.70	
Warner, Watts and Wruck 1988 USA	1962-1978	279 total sample 93 CEOs changes 56 forced losses 46 outside appointments	0.31 -0.26 0.14 0.34*	1.36 2.02	▪ For daily abnormal returns, no significant effect is found around announcement period for the entire sample. ▪ Only the outside change has a significant abnormal return ▪ For monthly data, a negative abnormal performance following the announcement.
Weisbach 1988 USA	1974-1983	256 Total sample (subgroup into - 93 inside dominant board. - 128 outside dominant or mixed board. - 286 resignations.	0.28	1.77	▪ The abnormal returns from resignation are always positive and sometimes significant. ▪ The significant and positive for the three–day window is found for resignation announcements. ▪ The poor stock return increases the probability of a CEO' s losing this job. ▪ The outside and mixed board improve the firm value than insiders do through their removal decision.

Appendix 2.2 Effect on the firm's performance

Author(s), Year, Country	Organisation	Time Frame	Change Variable	Performance variable	Major Findings
Allen, Panian and Lotz 1979 USA	All major league baseball teams	1920-1973	The frequency of managerial succession	Annual percentage of games won	▪ The management change has only small impact on subsequent team performance. ▪ The frequency of succession is negatively related to team performance ▪ The outside succession is associated with the deterioration in team performance. ▪ The type of succession explains only a small proportion of variance in team performance.

					▪ The inside succession was less likely to disrupt team performance than outside succession
Bathala and Rao 1995 USA	261 firms		Board composition	Performance	▪ The inverse relationship exists between the proportion of external payout and debt leverage. ▪ The outside director is used as the agency conflict-controlling mechanisms.
Brown 1982 USA	26 National Football League teams	1970-1978	The turnover of the managerial	Percentage of games won by a team in the regular season of a given year	▪ Succession is disruptive and produces a slide in performance. ▪ The bad performance lead to the firing of the coach. ▪ The succession and turnover indicators were negatively related to the percentage of wins in a

					season. ▪ Outside succession between season is marginal in its impact. ▪ No support for improvement in performance following the succession during the season.
Coughlan and Schmidt 1985 USA	249 firms 597 observations	1977-1980			▪ The abnormal stock price performance and the probability of a change in CEO are inversely related.
Denis and Denis 1995 USA	1689 firm	1985-1988			▪ Force resignations of top managers are preceded by large and significant declines in operating performance and followed by large improvements in performance. ▪ Normal retirements are followed by small

					increases in operating income and are also subject to a slightly higher than normal incidence of post-turnover corporate control activity.
Eitzen and Yetman 1972 USA	College basketball teams	1930-1970	Coaching change	Overall winning percentage	▪ Coach change and team effectiveness was found to be inversely related but this relationship depended on team performance prior to the change. ▪ The coaching shifts do not affect performance. ▪ The longer the coaching tenure, the greater the team success, but after a certain length of time team effectiveness begins to decline.

					▪ Negative correlation between turnover rate and organisational effectiveness.
Gamson and Scotch 1964 USA	22 professional baseball teams	1954-1961	Midseason managerial changes	Improvement in percentage of games won	▪ Succession decreased performance
Grusky 1963 USA	16 professional sports teams	1921-1941	Rate of managerial turnover	Percentage of games won	▪ Succession decreased performance.
Grusky 1964 USA	22 professional baseball teams	1954-1961	Midseason managerial changes	Improvement in percentage of games won	▪ Succession by outsiders decreased performance.
Helmich 1974 USA	29 manufacturing firms	1964-1972	Change in corporate president	Organisational growth	▪ Overall the succession increase the growth. ▪ The insider succession tends to reflect stability and conservatism in policies of expansion. ▪ The outside succession results in the high growth and new improvement.

Helmich and Brown 1972 USA	208 chemical companies	1959-1969	Change in president	Composite index and organisational change	▪ Analysis of this finding shows that inside succession at the presidential level, relative to outside succession, is more associated with management shifts in large organisations. ▪ Inside successors, relative to outside successor, tend to be more associated with technologically homogeneous organisations. ▪ Insider succession tends to exhibit less organisational change in the executive role constellation within two years after succession. ▪ Bring in an outsider may prompt their insiders to leaving their executive

					team. ▪ Succession by outsiders caused greatest amount of organisational change.
Kang and Shivdasani 1995 Japan	270 Japanese firms	1985-1990			▪ The likelihood of non-routine turnover is significantly related to industry-adjusted return on assets, excess stock returns, and negative operating income, but is not related to industry performance. ▪ Outside succession in Japan is more likely for firms with large shareholders and a main bank relationship. ▪ Constant with US data, we find a negative relation between non-routine top

					executive turnover likelihood and firm performance. ▪ The firms with ties to a main bank are more likely to remove top executives for poor earnings performance than are firm without a main bank. ▪ The main banks and large shareholders also play an important role in the likelihood that a new top executive will be appointed from outside the firm.
Kaplan and Minton 1994 USA and Japan	119 publicly traded Japanese countries 146 publicly traded US countries	1980-1988			▪ The appointment of both bank and corporate directors increase with earnings losses as well. ▪ The outside appointments are most closely related to stock

					performance and negative current income. ▪ Negative income is associated with an outside appointment in the same and following year. ▪ Outside appointment are most sensitive to current measures of performance.
Kaplan 1994 Germany	42 German Companies	1980-1989			▪ Turnover of the management board increases significantly with poor stock performance and particularly poor earnings, but it is unrelated to sales growth and earning growth. ▪ Turnover and appointments of supervisory board increase with poor stock performance, but are unrelated to other measures of

					performance. ▪ Poor stock performance and inability to generate positive income increase the likelihood of top management turnover.
Lieberson and O'Conner 1972 USA	167 large corporations	1946-1965	Leadership change	Sales, net earning, profit margins	▪ The leadership has effect on the company performance. ▪ A substantial shift in the quality of top administration, either upward or downward, may set in motion long-tern changes not immediately apparent. ▪ The lag effect on sales and net income is relatively minor. ▪ All three performance variables are affected by forces beyond a leader's immediate

					control. ▪ The leadership has a smaller effect them either industry or company on sales and net earnings.
Mak and Roush 2000 NZ	110 NZ initial publics offering firms	1983-1987	Board composite		▪ Firm that have lower inside share ownership tend to employ larger boards ▪ The proportion of outside director is positively related to the extent of growth opportunities available to a firm and negatively related to inside share ownership. ▪ Firms with relatively more growth opportunities are likely to have dual leadership. ▪ Majority of firms in the sample has less than eight directors on their board.

					▪ The results are consistent with the argument that firms associated with greater agency costs are likely to use relatively more outside directors for monitoring purposes.
Murphy and Zimmerman 1993 USA	1630 departing executive serving in 915 corporations	1965-1989	Departing executive	R&D, advertising, accounting accruals and earnings, capital expenditure, sales assets and stock prices.	▪ Little evidence to support that the outgoing CEOs exercise their discretion over accounting or investment variables to increase their earning-based compensation before the year of departing. ▪ Some evidence consistent with the CEOs take a big bath: after controlling for firm performance, market-adjusted accounting accruals are lower

					in the fiscal year in which the incumbent CEO is replaced by his successor.
Osborn, Jauch, Martin and Glueck 1981 USA	313 large industrial firms	1930-1974	CEO Succession	ROA	▪ The profit were found to be a weak predictor of succession ▪ Found other factors to be influencing the succession.
Pourciau, 1993 USA	267 companies 73 firm of non-routine CEO changes	1985-1988	Non-routine managerial turnover	Financial statement	▪ The incoming executives manage accruals in a way that decreases earning in the year of the executive change and increases earnings the following year. ▪ Incoming executive record large write-offs and special item the year of the management change
Rediker and Seth 1995	81 banks holding companies	1982-1985	The effect of different governance		▪ There are considerable variations in the

USA			mechanism		patterns of governance mechanisms, which are observed. ▪ There are different mechanism used between large and small firm.
Samuelson, Galbraith and McGuire 1985 USA	61 pairs of firms total of 122 firms	1970-1976			▪ The change in leadership position do not affect revenues and rate if return significantly. ▪ No support for change following performance firms. ▪ Internal successions are more common among companies performing above average. ▪ Outsiders are relatively more preferred when organisational performance is below average.
Smith,	50 ministers	1961-1980	Minister	Performance of	▪ Effective

Carson and Alexander 1984 USA	of Northeast Ohio		turnover	the church.	leadership was found to be associated with improved organisational performance. ▪ Succession in and of itself was not related either to performance disruption or to improved performance.
Thomas 1988 UK	12 large retail firms in U.K.	1965-1984	CEO, MD and chairman turnover	Sale, profits and net asset	▪ The leaders have little impact on organisational performance because they are constraint by other factors. ▪ However, leader differences do account for performance variations within firms to a substantial degree, and these impacts are generally insufficient to outweigh the in-built difference

					among firms that largely account for performance variation among firms.
Trow 1961 USA	108 small manufacturing companies	Varies by organisation	Annual rate of secession of managers	Change in profitability	▪ Organisations that plan for succession show profitability.

Appendix 3.1 Sample Companies used in share Returns Analysis

CODE	COMPANY	No. of Announcements	Market Capitalisation $000 (31/12/99)	P/E Ratio	Dividend yield %	Turnover Volume (000)
ADV	ADVANTAGE GROUP LTD	10	209570	47.01	0	35127
AFF	AFFCO HOLDINGS LTD	5	65467	10.05	0	34899
AIRA	AIR NEW ZEALAND LTD	8	683013	5.17	6.356	52316
AMP	AMP LTD	2	1295663	0	2.2	43284
APF	APPLE FIELDS LTD	4	2983	0	0	7470
AQL	AQUARIA 21 LTD	1	41999	0	0	127054
ARB	ARTHUR BARNETT LTD	4	15503	37.27	2.804	263
BCH	BAYCORP HOLDINGS LTD	8	635821	36.02	2.877	32442
BRY	BRIERLEY INVESTMENTS LTD	14	1094451	10.31	0	1242529
BWY	BROADWAY INDUSTRIES LTD	3	4747	0	0	1343
CAH	CARTER HOLT HARVEY LTD	10	4341428	40.15	2.597	373379
CAV	CAVALIER CORPORATION LTD	2	125965	10.41	11.087	6470
CDL	CDL HOTELS NEW ZEALAND LTD	6	101288	18.55	3.86	25896
CDI	CDL INVESTMENTS NEW ZEALAND LTD	1	39414	11.78	12.979	11559
CED	CEDENCO FOODS LTD	2	14814	6.71	0	1866
CEM	CERAMCO CORPORATION LTD	13	68754	19.44	7.331	11156
CGH	COLONIAL LTD	1	221140	13.84	2.38	14871
CUE	CUE ENERGY RESOURCES NL	8	37159	1.69	0	14444
DBN	DAIRY BRANDS NEW ZEALAND LTD	3	13161	0	0	47959
DBG	DB GROUP LTD	4	236972	20.22	10.162	16833
DTL	DESIGNER TEXTILES (NZ) LTD	0	11795	6.38	9.046	13844
DON	DONAGHYS LTD	5	44787	10.89	5.479	3312
DPC	DORCHESTER PACIFIC LTD	4	28995	10.73	5.131	4332
EEQ	EASTERN EQUITIES CORPORATION LTD	3	N/A	N/A	N/A	N/A
EBO	EBOS GROUP LTD	6	95619	13.6	4.506	5306
ENC	ENERCO NEW ZEALAND LTD	2	N/A	N/A	N/A	N/A
ERN	ERNEST ADAMS LTD	1	N/A	N/A	N/A	N/A
EVF	EVERGREEN FORESTS LTD	2	67032	15.56	0	12155
FER	FERNZ CORPORATION LTD	3	417235	9.65	5.753	33498
FIR	FIRESTONE N.Z. LTD	1	N/A	N/A	N/A	N/A
FLB	FLETCHER CHALLENGE LTD - BUILDING	5	959167	18.33	6.351	214913
FEG	FLETCHER CHALLENGE LTD - ENERGY	4	1707760	9.82	0	197186
FFS	FLETCHER CHALLENGE LTD - FORESTS	6	657971	9.8	0	420125
FLP	FLETCHER CHALLENGE LTD – PAPER	6	854766	0	3.341	440716
FOR	FORCE CORPORATION LTD	9	89812	8.4	0	74072
FSL	FRUITFED SUPPLIES LTD	5	N/A	N/A	N/A	N/A
GMF	GOODMAN FIELDER LTD	12	107450	22.57	5.34	19950
GRC	GROCORP PACIFIC LTD	8	10592	0	0	1372
GPG	GUINNESS PEAT GROUP PLC	1	584290	1.92	1.1	81931
HAB	HABITAT GROUP LTD	5	N/A	N/A	N/A	N/A

HLG	HALLENSTEIN GLASSON HOLDINGS LTD	6	139198	14.06	5.597	10501
HBY	HELLABY HOLDINGS LTD	1	105531	8.68	9.95	12347
HGD	HERITAGE GOLD NZ LTD	4	13655	0	0	2913
INL	INDEPENDENT NEWSPAPERS LTD	5	1084159	39.55	4.264	37487
ITC	IT CAPITAL LTD	1	108166	0	0	86614
JFC	JARDINE FLEMING CHINA REGION LTD	4	7466	0	0	1077
KIN	KINGSGATE INTERNATIONAL CORPORATION LTD	3	64875	8.84	0	4500
LNN	LION NATHAN LTD	10	2379994	20.31	4.658	198091
LWR	LWR INDUSTRIES LTD	1	N/A	N/A	N/A	N/A
LPC	LYTTELTON PORT CO LTD	1	182737	12.35	6.053	5001
MMC	MACRAES MINING CO LTD	6	N/A	N/A	N/A	N/A
MAX	MAX RESOURCES LTD	5	4439	0	0	0
MDL	McCONNELL DOWELL CORPORATION LTD	5	72427	4.47	6.93	77
MET	MELIFECARE LTD	5	135702	23.54	1.045	25618
MBN	MILBURN NEW ZEALAND LTD	1	N/A	N/A	N/A	N/A
NMH	NATIONAL MUTUAL HOLDINGS LTD	5	258866	14.91	3.36	24394
NCH	NATURAL GAS CORPORATION HOLDINGS LTD	8	709886	12.79	8.292	209321
NZX	NEW ZEALAND EXPERIENCE LTD	6	6725	34.19	0	1326
NLL	NEW ZEALAND LIGHT LEATHERS LTD	1	N/A	N/A	N/A	N/A
NMP	NEWMARKET PROPERTY TRUST	1	44043	5.64	15.323	12235
NTH	NORTHLAND PORT CORPORATION (NZ) LTD	4	57235	13.04	5.949	4527
NPX	NUPLEX INDUSTRIES LTD	3	199346	13.08	4.353	15413
TNZ	NZSE10 INDEX FUND	1	146645	26.62	5.571	64906
OTR	OTTER GOLD MINES LTD	5	39578	0	0	17313
OWN	OWENS GROUP LTD	3	71811	11.66	11.752	4874
PRG	PACIFIC RETAIL GROUP LTD	2	85656	0	0	10524
PYN	PAYNTER TIMBER GROUP LTD	5	11051	0	0	8913
PDL	PDL HOLDINGS LTD	2	75433	33.69	0	2623
POT	PORT OF TAURANGA LTD	6	454324	24.4	0	2901
POA	PORTS OF AUCKLAND LTD	5	728784	20.38	4.885	13304
PRO	PROGESSIVE ENTERPRISES LTD	3	N/A	N/A	N/A	N/A
PUR	PURE NEW ZEALAND LTD	4	8748	0	0	1129
QCH	QEST NEW ZEALAND LTD	1	N/A	N/A	N/A	N/A
RWL	RADIOWORKS NEW ZEALAND LTD	3	93247	0	3062	2699
REI	REID FARMERS LTD	4	35288	7.97	10.661	2832
RNS	RENAISSANCE CORPORATION LTD	2	17656	30.77	0	6769
RCH	RICHINA PACIFIC LTD	17	37538	0	0	9422
RIL	ROLLER INTERNATIONAL LTD	5	2735	0	0	73
SAN	SANFORD LTD	1	535489	10	3.998	11800
SVY	SAVOY EQUITIES LTD	3	26554	0	0	25740
SFH	SEAFRESH NEW ZEALAND LTD	6	9240	16.22	0	11941
SHP	SHORTLAND PROPERTIES LTD	1	197263	11.4	2.47	159690
SJL	SHOTOVER JET LTD	4	28596	17.23	0	3755
SKC	SKY CITY LTD	3	712465	14.01	8.673	86550
SKY	SKY NETWORK TELEVISION LTD	1	1151705	0	0	123.113
SEU	SOUTH EASTERN UTILITIES LTD	2	58264	2.98	6.155	6815
SPN	SOUTHPORT NEW ZEALAND LTD	2	32076	0	8.292	1651
SPE	SPECTRUM RESOURCES LTD	4	18422	6.2	0	35004
STL	ST LUKES GROUP LTD	4	279567	5.75	9.678	28343
STU	STEEL & TUBE HOLDINGS LTD	7	162270	26.53	3.245	22183
SMM	SUMMIT RESOURCES NL	3	9702	0	0	6599
TAS	TASMAN AGRICULTURE LTD	3	102600	10.62	3.766	20071
TEL	TELECOM CORP OF NEW ZEALAND LTD	7	15779652	19.02	7.629	1143865

CMO	THE COLONIAL MOTOR CO LTD	1	80458	10.51	0	2338
WHS	THE WAREHOUSE GROUP LTD	7	1237496	22.79	3.297	38537
THL	TOURISM HOLDINGS LTD	1	292748	21.06	0	29192
TTP	TRANS TASMAN PROPERTIES LTD	4	161652	130.43	0	108152
TLT	TRANSALTA NEW ZEALAND LTD	6	617841	16.09	5.493	26320
TRH	TRANZ RAIL HOLDINGS LTD	3	428812	5.5	4.789	42644
TPW	TRUSTPOWER LTD	4	750427	33.4	3.154	31216
UNL	UNITEDNETWORKS LTD	2	893669	9.23	8.601	1157
UIL	UTILICO INTERNATIONAL LTD	1	30470	0	0	24464
WAM	WASTE MANAGEMENT NZ LTD	2	467530	21.9	1.633	5684
WKL	WILLIAMS & KETTLE LTD	2	30341	14.38	9.419	688
WHO	WILSON & HORTON LTD	6	N/A	N/A	N/A	N/A
WRI	WRIGHTSON LTD	5	57672	0	0	39625
ZNZ	ZUELLIG NEW ZEALAND LTD	3	N/A	N/A	N/A	N/A

Note: N/A represents unavailable data.

Appendix 3.2 Sample of the Selected Companies to Analyse Financial Performance NZSE-40

CODE	COMPANY - NZSE-40	No. of Announcements	Market Capitalisation $000 (31/ 12/ 98)	P/E Ratio	Dividend yield %	Turnover Volume (000)
AIA	AUCKLAND INTERNATIONAL AIRPORT LTD	0	1113000	27.09	0	178848
AIRA	AIR NEW ZEALAND LTD	8	737138	10	7.82	78007
AMP	AMP LTD	2	222.719			114956
BCH	BAYCORP HOLDINGS LTD	8	315995	28.45	4.885	12893
BRY	BRIERLEY INVESTMENTS LTD	14	1283668	0	10.448	1375610
CAH	CARTER HOLT HARVEY LTD	10	2949720	49.85	7.024	459501
CGH	COLONIAL LTD	1	191645	24.04	2.5	22049
CIL	CORPORATE INVESTMENTS LTD	0	369219	17.91	5.207	162818
DBG	DB GROUP LTD	4	282350	11.46	8.529	17305
FAP	FISHER & PAYKEL INDUSTRIES LTD	0	805212	22.05	3.922	44165
FEG	FLETCHER CHALLENGE LTD - ENERGY	4	1216849	10.87	6.633	186955
FER	FERNZ CORPORATION LTD	3	855721	11.35	4.592	27663
FFS	FLETCHER CHALLENGE LTD - FORESTS	6	537058	0	2.369	326553
FLB	FLETCHER CHALLENGE LTD - BUILDING	5	985105	7.52	7.132	209123
FLP	FLETCHER CHALLENGE LTD – PAPER	6	829347	0	3.526	379594
GMF	GOODMAN FIELDER LTD	12	154985	16.05	4.36	14459
GPG	GUINNESS PEAT GROUP PLC	1	565251	19.31	0.99	169844
IFT	INFRASTRUCTURE & UTILITIES NZ LTD	0	225291	15.97	7.212	122144
INL	INDEPENDENT NEWSPAPERS LTD	5	969046	19.35	4.571	23956
KIP	KIWI INCOME PROPERTY TRUST	0	313622	10.37	9.404	101863
LNN	LION NATHAN LTD	10	2645276	19.44	3.802	526906
MBN	MILBURN NEW ZEALAND LTD	1	299801		8.01	25407
NCH	NATURAL GAS CORPORATION HOLDINGS LTD	8	816369	12.29	7.931	47004
NMH	NATIONAL MUTUAL HOLDINGS LTD	5	303548	24.07	3.02	30831
NPX	NUPLEX INDUSTRIES LTD	3	178993	127	4.822	29958
NZR	THE NEW ZEALAND REFINING CO LTD	0	384000	12.72	9.188	1099
POA	PORTS OF AUCKLAND LTD	5	914293	22.68	3.894	12710
PRO	PROGESSIVE ENTERPRISES LTD	3	471046		3.928	41359
QCH	QEST NEW ZEALAND LTD	1	492798	15.19	1.544	61
SAN	SANFORD LTD	1	346689	14.98	4.975	21659
SKC	SKY CITY LTD	3	692994	290.86	6.012	30980
SKY	SKY NETWORK TELEVISION LTD	1	950614	136.13	0	79195
STL	ST LUKES GROUP LTD	4	291303	7.25	9.182	46311

STU	STEEL & TUBE HOLDINGS LTD	7	158743	18.27	11.609	28042
TEL	TELECOM CORP OF NEW ZEALAND LTD	7	14454193	17.73	7.508	795763
TLS	TELSTRA CORPORATION LTD	0	662431			8948
TLT	TRANSALTA NEW ZEALAND LTD	6	617721	16.6	5.791	18815
TRH	TRANZ RAIL HOLDINGS LTD	3	525359	11.35	3.908	54631
TTP	TRANS TASMAN PROPERTIES LTD	4	166695	21.92	9.659	49649
WHS	THE WAREHOUSE GROUP LTD	7	880231	29.97	1.925	7936

NZSE-SCI

CODE	COMPANY-NZSE-Sci	No. of Announcements	Market Capitalisation $000 (31/ 12/ 98)	P.E. Ratio	Dividend yield %	Turnover Volume (000)
ADV	ADVANTAGE GROUP LTD	10	19939	0	0	10975
AFF	AFFCO HOLDINGS LTD	5	49101	0	5208	65566
ARB	ARTHUR BARNETT LTD	4	16807	0	3.913	317
BWY	BROADWAY INDUSTRIES LTD	3	4481	0	0	662
CDI	CDL INVESTMENTS NEW ZEALAND LTD	1	40671	5.24	12.438	9519
CED	CEDENCO FOODS LTD	2	10292	7.47	0	1341
CEM	CERAMCO CORPORATION LTD	13	48911	0	6.663	17734
CEN	CONTACT ENERGY LTD	0	107399	25.11	2.38	
CNZ	CAPITAL PROPERTIES NEW ZEALAND LTD	0	78809			34009
DMB	DAMBA HOLDINGS LTD	0	16020	115.98	0	1228
DPC	DORCHESTER PACIFIC LTD	4	10275	31.49	9.046	9430
DTL	DESIGNER TEXTILES (NZ) LTD	0	13384	11.22	9.95	4619
EEQ	EASTERN EQUITIES CORPORATION LTD	3	16860	0	9.138	6525
ELD	ELDERCARE NEW ZEALAND LTD	0	3299	197.08	0	
FOR	FORCE CORPORATION LTD	9	108394	14.77	8.527	30691
FXS	FREIGHTWAYS EXPRESS LTD	0	32400	6.25	5.21	2508
GRC	GROCORP PACIFIC LTD	8	9533		0	642
HBY	HELLABY HOLDINGS LTD	1	108169	7.88	9.719	13257
HED	HORIZON ENERGY DISTRIBUTION LTD	0	137645	20.6	3.44	
HGD	HERITAGE GOLD NZ LTD	4	1931		0	180
LPC	LYTTELTON PORT CO LTD	1	187813	14.62	5.083	10639
MAX	MAX RESOURCES LTD	5	4439		0	50
MET	MELIFECARE LTD	5	141870	16.61	2.586	17324
MIG	MANOR INNS GROUP LTD	0	2088	1.65	0	235
NTH	NORTHLAND PORT CORPORATION (NZ) LTD	4	60138	19.1	6.691	6760
OTR	OTTER GOLD MINES LTD	5	78429	7.79	0	5228
PFI	PROPERTY FOR INDUSTRY LTD	0	105919	13	8.885	71596
POT	PORT OF TAURANGA LTD	6	332614	28.54	4.46	4493
RBD	RESTAURANT BRANDS NEW ZEALAND LTD	0	91800	6.45	10.503	78302
REI	REID FARMERS LTD	4	31927	7.94	10.474	2003
RIL	ROLLER INTERNATIONAL LTD	5	8.205		0	12
RNS	RENAISSANCE CORPORATION LTD	2	8240		0	1388
SCL	SOUTHERN CAPITAL LTD	0	26982	12.33	0	
SEU	SOUTH EASTERN UTILITIES LTD	2	63069	10.47	11.372	5511
SJL	SHOTOVER JET LTD	4	25129		0	2083
SPN	SOUTHPORT NEW ZEALAND LTD	2	33696	12.51	7.534	1457
TAS	TASMAN AGRICULTURE LTD	3	107937	8.76	4.167	18914

TNZ	NZSE10 INDEX FUND	1	187456	19.55	6.682	44310
UIL	UTILICO INTERNATIONAL LTD	1	47486	77.67	0	
WKL	WILLIAMS & KETTLE LTD	2	23631	21.46	11.124	1056

Note: N/A represents the unavailable data.

Appendix 3.3[10]

The Calculation of Financial Data

Sales performance

$$\text{Sales growth} = \frac{Sales_{t} - Sales_{t-1}}{Sales_{t-1}} \times 100$$

Earnings Performance

$$\text{Change in Pretax income/ total asset} = \frac{Net\ \text{Pr}ofit\ before\ tax_{t} - Net\ \text{Pr}ofit\ before\ tax_{t-1}}{Total\ asset_{t}}$$

Financing policy

$$\text{Debt ratio} = \frac{\text{Total}\ liabilities}{Total\ assets}$$

$$\text{Interest Coverage ratio} = \frac{Operating\ profit\ before\ income\ tax + \text{int}erest\ \text{exp}ense}{Interest\ \text{exp}ense}$$

Financial status

$$\text{Quick ratio} = \frac{Current\ assets - Inventories}{Current\ liabilities}$$

[10] The definitions of the ratio are from Brigham and Gapenski (1994) and Campsey *et al.* (1991).